

N-ABF-~~564~~
033

WASH Field Report No. 300
ISPAN Report No. 26

Action Plan

**DEVELOPMENT OF THE NATIONAL STRATEGY
TO CREATE AND MONITOR WATER USER ASSOCIATIONS
IN TUNISIA**

Prepared for the USAID Mission to Tunisia by
Water and Sanitation for Health (WASH) Project, Task No. 136
Irrigation Support Project for Asia and the Near East (ISPAN), Activity No. 681C
and
Systems Approach to Regional Income and Sustainable Resource Assistance (SARSA II)

May 1990

WASH Field Report No. 300
ISPAN Report No. 26

Action Plan

**DEVELOPMENT OF THE NATIONAL STRATEGY
TO CREATE AND MONITOR WATER USER ASSOCIATIONS
IN TUNISIA**

Prepared for the USAID Mission to Tunisia by
Water and Sanitation for Health (WASH) Project, Task No. 136
Irrigation Support Project for Asia and the Near East (ISPAN), Activity No. 681C
and
Systems Approach to Regional Income and Sustainable Resource Assistance (SARSA II)

by
Fred Rosenswieg, WASH
Pamela Stanbury, ISPAN
Curt Grimm, SARSA

May 1990

RELATED WASH REPORTS

Organization of a Colloquium on Rural Water Supply and Sanitation, Kasserine, Tunisia, by Fred Rosensweig and Raymond B. Isley. January 1983. Field Report No. 67.

Evaluation of Health and Social Benefit of Springs Capped for Irrigation, Further Adapted for Domestic Use in Central Tunisia, by Raymond B. Isley. May 1983. Field Report No. 84.

Midterm Evaluation of the USAID/Tunisia Rural Potable Water Institutions Project, by Lee Jennings, Ridha Boukraa, Mohamed Frioui, Richard Swanson, Sereen Thaddeus, and Alan Wyatt. July 1989. Field Report No. 256. (French and English)

Plan de Travail de L'Unite d'Autogestion, by Lee Jennings, Sereen Thaddeus, and Alan Wyatt. September 1989. Field Report No. 276. (French only)

Health and Hygiene Education and Women's Involvement in the Tunisia Rural Potable Water Institutions Project, by Sereen Thaddeus. November 1989. Field Report No. 277. (French and English)

Engineering Design Considerations: Tunisia Rural Potable Water Institutions Project, by Alan Wyatt. November 1989. Field Report No. 279. (French and English)

A Re-examination of Costs and Benefits of Rural Water Supply Projects in Central Tunisia, by Alan Wyatt. April 1990. Field Report No. 298. (French and English)

Technical Assistance and Planning for Health and Hygiene Education and Women's Involvement in the Tunisia Rural Potable Water Institutions Project, by Elaine Elizabeth Rossi. May 1990. Field Report No. 307. (French and English)

Finalization of the Action Plan for the Development of the National Strategy to Create and Monitor Water User Associations in Tunisia, by H. L. Jennings. WASH Trip Report, May 1990.

CONTENTS

Chapter	Page
ACKNOWLEDGEMENTS	iii
ACRONYMS	v
EXECUTIVE SUMMARY	vii
1. INTRODUCTION	1
1.1 Background to the Action Plan for the Development of the National Strategy to Create and Monitor Water User Associations in Tunisia	1
1.2 Purpose of the Action Plan	2
1.3 Team Methodology	2
1.4 Collaboration with KfW	3
2. SUMMARY DESCRIPTION OF ACTION PLAN	5
2.1 Key Issues to be Addressed by the Action Plan	5
2.2 Overview of the Action Plan	7
2.3 Summary Description of Each Component in the Action Plan	9
2.3.1 Applied Studies and Consultancies	9
2.3.2 Pilot Projects	10
2.3.3 Training	11
2.3.4 Procurement	11
2.3.5 Development and Finalization of the Strategy	12
2.4 Monitoring and Coordinating the Action Plan	12
3. CONCLUSIONS AND RECOMMENDATIONS	19
3.1 Conclusions	19
3.2 Recommendations	19

TABLES

A. 18 Month Timeline Ending December 1991	8
B. Summary-Technical Assistance	14

SCOPES OF WORK

Comparative Study of Approaches to WUA Formation	23
Cost-Benefit Analysis of WUA Creation and Operation	27
Institutional Analysis	31
Development of a Management Information System (MIS) for Ongoing Monitoring of WUAs	35
Pilot Project to Monitor the Formation and Functioning of WUAs Created with KfW Support	37
Assessment of WUA Capacity for Community Development	41
Asian Study Tour	43
Development of Training Programs for Pump Operators	45
Development of Training Programs for the Water User Associations	49
Development of Training Program for Hygiene Education	53
Training of Trainers: Engineers and Technicians	57
Training of Trainers: Community Organization Specialists	61
Training of Trainers: Hygiene Education Specialists	65
Refresher Workshops for Trainers	69
Water System Maintenance Policy and Procedures	71
Social Marketing	77
Evaluation of Training	79
Mid-Term Review Workshop of Action Plan Progress	81
Preparation of WUA Procedures Manual	83
Preparation of Draft Text on National WUA Strategy	85
National Seminar for Presentation of WUA Strategy	87

ACKNOWLEDGEMENTS

The Action Plan for the Development of the National Strategy to Create and Monitor Water User Associations in Tunisia was prepared with funds reallocated from USAID/Tunisia's Rural Potable Water Institutions Project (664-0337). The team included Mr. Fred Rosensweig, Ms. Pamela Stanbury, and Mr. Curt Grimm, representing WASH, ISPAN, and SARSA II respectively.

The team would like to thank the many individuals who assisted in preparing the Action Plan. In Genie Rural/Tunis, Mr. Khamais Alouini, Mr. Mohamed Jaoua, and Mr. Mahmoud Baccar all supplied valuable information and feedback on national level issues in WUA formation at a time when severe floods in the country were demanding much attention.

Ms. Diana Putman, Project Development Officer of USAID/Tunisia, provided support and guidance to the team and actively participated in briefings and the final debriefing with GOT staff. Ms. Nancy Tumavick, Deputy Director for Project Management, also demonstrated her interest in the Action Plan by joining our briefing and final debriefing with GOT staff. A debriefing with the Mission Director, Mr. George Camer, was held by the team leader.

The team would also like to thank the numerous people who made possible our field trip to Kasserine and Kairouan Governorates. In the Central Tunisia Development Authority (CTDA) (CRDA)/Kasserine, Mr. Ridha Fekih-Salem, Commissioner, Mr. Mosbah Hadji, Engineer, and Mr. Belgacem Khessaissia, former Head of the Regional Support Unit (UAG)/Kasserine, all provided valuable information and assistance during the visit to Kasserine. Ms. Denise Harrison, USAID PSC/Kasserine, also provided valuable information on the hygiene education activities and the role of women in Kasserine. Thanks are also given to the numerous local-level officials, field staff, and WUA leaders who helped us on our visits to water points in the project area.

We also wish to thank the CRDA officials and field staff in Kairouan who helped make our brief visit productive. We would especially like to thank Mr. Abelfattah Faddar, Engineer responsible for WUA formation in Kairouan, for his assistance and guidance during our field trip to visit water projects in Kairouan.

A special note of thanks goes to our colleagues from the Kreditanstalt fur Wiederaufbau (KfW), Messrs. Michael Schucht, Frank Bliss, and Theo Dickmann, who made special efforts to ensure close collaboration between the two donors in preparing the Action Plan.

Finally, the team would like to thank Mr. Lee Jennings, WASH consultant, for his help in setting up the guidelines for the Action Plan and his participation in the final debriefing with GOT; Mr. Tom Leonhardt for facilitating the Team Planning Meeting; and ISPAN for providing the support for the final production of the Action Plan.

ABOUT THE AUTHORS

Fred Rosensweig has been the Associate Director for Human Resources and Institutional Development for the WASH Project since 1981 and a vice-president with Training Resources Group since 1984. He is experienced in the development of training plans and systems, management consulting, and workshop design and delivery. He has lived overseas in Senegal, Cameroon, and Tunisia and speaks fluent French.

Pamela Stanbury has a Ph.D. in Development Anthropology from the University of Arizona. She is currently an independent consultant. She has extensive experience in irrigation and beneficiary participation. Dr. Stanbury has lived for extended periods of time in India and Sri Lanka. She speaks fluent French.

Curt Grimm is a full-time staff member of the Institute for Development Anthropology. He expects to receive his Ph.D. in Development Anthropology from SUNY Binghamton in 1990. His interests are in participatory community resource management, resettlement, and river basin development. He has lived in Burkina Faso and Mali and speaks fluent French.

ACRONYMS

AIC	<i>Association d'Interêt collectif</i> , Water User Association
CRDA	<i>Commissariat Regional au Développement Agricole</i> , Regional Agricultural Development Commission
CTDA	Central Tunisia Development Agency, <i>Office de Développement de la Tunisie Centrale (ODTC)</i>
GOT	Government of Tunisia
GR	<i>Genie Rural</i> , Rural Engineering Unit (Ministry of Agriculture)
ISPAN	Irrigation Support Project for Asia and the Near East
KfW	<i>Kreditanstalt für Wiederaufbau</i> , German Development Bank
MIS	Management Information System
MOA	Ministry of Agriculture
O&M	Operation and Maintenance
PACD	Project Activity Completion Date
PDR	<i>Programme de Développement Rural</i> , Rural Development Program
SARSA	Systems Approach to Regional Income and Sustainable Resource Assistance
SONEDE	<i>Société Nationale d'Exploitation et de Distribution des Eaux</i> , National Water Company
TA	Technical Assistance
TD	Tunisian Dinar
TOT	Training of Trainers
TPM	Team Planning Meeting
WASH	Water and Sanitation for Health Project
WUA	Water User Association

EXECUTIVE SUMMARY

This Action Plan for the Development of the National Strategy to Create and Monitor Water User Associations in Tunisia was developed during a two-week period from February 5 to 16, 1990, by a team representing WASH, ISPAN, and SARSA. It was initiated by the USAID/Tunisia Mission and builds on USAID/Tunisia's on-going support for improving rural water supplies in Tunisia. Since 1986, USAID has provided support for the Rural Potable Water Institutions Project in Kasserine and North Gafsa Governorates. One of the objectives of the project has been to demonstrate a model for increasing beneficiary participation that may be appropriate for adoption as a nationwide strategy. The success in fostering water user associations (WUAs) in Kasserine and North Gafsa sparked interest at a national level and the Government of Tunisia has announced its intention to promote a national strategy for creating WUAs. To assist in this effort, USAID has reallocated project funds to help develop an Action Plan that would culminate in an operational national strategy, while also providing additional PL480 Title I local currency resources to ensure construction goals of the project are met.

The purpose of the Action Plan is to identify and describe a set of activities which need to be undertaken and which will promote the national strategy. Broad guidelines for these activities were defined in a preliminary meeting with relevant Government of Tunisia officials and a WASH consultant in October 1989. The Action Plan builds upon these guidelines and presents detailed Scopes of Work for activities in five broad categories: (1) applied studies and consultancies, (2) pilot projects, (3) training, (4) procurement, and (5) development and finalization of the strategy. Each activity addresses key issues that remain unresolved or need to be examined before embarking on WUA creation on a national scale. Successful implementation of the Action Plan should provide the information needed to determine an approach to follow at a national level.

The team held discussions with Government of Tunisia staff to get their views on the key issues that need to be addressed in the Action Plan. A field trip was then made to the USAID-supported project in Kasserine Governorate where WUAs have been created. The team also visited Kairouan Governorate where WUAs are being formed by the GOT using a somewhat different approach. The issues identified are summarized as follows:

- (1) Division of O&M responsibilities between WUAs and the GOT need to be clearly defined.
- (2) The true cost of creating, training, and monitoring WUAs needs to be determined.

- (3) The effectiveness of the current financial management system envisioned by GR/Tunis needs to be reviewed to ensure that it provides incentives for WUAs to contribute regularly.
- (4) An effective system for incorporating hygiene education needs to be addressed.
- (5) The effects of mixed systems for irrigation and potable water on WUA formation need to be determined and possible modifications made for multiple use.
- (6) An array of training materials and training of trainer courses need to be developed.
- (7) The types of skills and expertise required for those responsible for creating WUAs in the Governorates need to be determined, taking into consideration the financial and staffing constraints within GR.
- (8) Experiences gained in forming WUAs in Tunisia need to be compared to draw lessons for a nationwide strategy.
- (9) The organizational structure in GR required to implement an effective national strategy needs to be assessed.
- (10) The relationship between WUAs and other community development activities needs to be assessed.

The Action Plan marks a successful attempt to coordinate USAID's support for the rural water sector in Tunisia with that of another donor, the Kreditanstalt für Wiederaufbau (KfW). KfW is embarking on a second phase of support for the installation of 80 new rural water projects throughout Tunisia and has expressed its interest in the WUA concept. KfW representatives joined the team on the field trip, participated in joint discussions with the GOT and worked closely on the outline of the Action Plan with the team. The result is an Action Plan that fully incorporates KfW's and USAID's mutual support for the WUA concept. It was agreed that KfW-funded project sites will serve as pilot projects for monitoring the formation of WUAs. In turn, training materials developed during the Action Plan will be used and tested in KfW project activities. KfW will also provide funding for vehicles, computers, and publishing.

The Action Plan is divided into two sections. The first provides a general background, key issues that are addressed, a summary of the activities proposed, and a schedule for the proposed timing of each. The second section includes a detailed Scope of Work (SOW) for

each activity, with tasks to be undertaken and the level of effort required. Table 2 at the end of Chapter 2 summarizes the technical assistance required.

The team recommends that successful implementation of the Action Plan will require some immediate actions on the part of GR/Tunis and USAID/Tunisia. As soon as possible, GR/Tunis should assign a full-time person to coordinate and monitor the Action Plan and should assign two people per Governorate to work full time on forming WUAs as agreed with KfW. As soon as possible, USAID should do the needed administrative work to begin the Action Plan and should engage a consultant to identify local resources to help undertake the Action Plan. Finally, many of the activities in the Action Plan are designed to follow in sequence and efforts should be made to maintain that sequence.

The final draft of this report was reviewed by relevant GOT and USAID personnel in April 1990. This final version includes an additional SOW for the Development of Water System Maintenance Policy and Procedures. A consultant also identified potential local TA resources to undertake the Action Plan in April 1990.

Chapter 1

INTRODUCTION

1.1 Background to the Action Plan for the Development of the National Strategy to Create and Monitor Water User Associations in Tunisia

Community participation associated with water point exploitation is not a new idea in rural Tunisia. During the colonial era the French instituted a program that formed Associations d'intérêts collectif (AICs), or water user associations (WUAs), around water points to recover the high costs of drawing water from deep wells in dry areas. The objectives were to collect a government tax on water users rather than to form community associations around collective ownership and management of water systems. Following independence, the Tunisian government began assuming the costs of installing and operating nontraditional potable water systems in rural areas.

In the early 1980s USAID initiated support for a project to improve access to potable water for the rural, predominantly dispersed, populations in one region of central Tunisia (Rural Potable Water Project, USAID No. 664-0312.7). The project, implemented by the Central Tunisian Development Authority (CTDA), involved improving existing water points and drilling and motorizing deep wells in areas where no other potable water sources were conveniently accessible.

The introduction of complex and costly water systems followed earlier projects that had attempted to utilize less sophisticated technology to draw water. Limited success in keeping systems in operating condition and a diminishing national budget for O&M of potable water systems led USAID to support a follow-on project in 1986, the Rural Potable Water Institutions Project. This project introduced a concept to organize the water users into associations that would assume some of the costs and responsibilities of operating rural water systems.

By the end of 1987, functioning WUAs had been formed by the CTDA with USAID support in Kasserine and North Gafsa Governorates and the concept had spread to the neighboring Kairouan Governorate. However, the WUAs lacked the legal and institutional framework to collect and disburse funds as independent entities. WUAs were finally given legal status in early 1988 with an Act of the National Assembly and the signature of the President of Tunisia.

The success achieved in creating functioning WUAs in central Tunisia sparked interest at the national level, where the changing political and economic climate is moving toward greater decentralization. The agency responsible for most of the water systems in rural Tunisia, the Genre Rural (GR) Direction of the Ministry of Agriculture, announced its intention to

promote a national strategy for the creation of WUAs, and instructed the governorate-level GR offices (*arrondissements*) to begin organizing communities to assume some degree of responsibility for operating and maintaining water systems. USAID supported this decision by rebudgeting \$1 million of project funds to develop and implement an Action Plan that would help the GOT develop an operational national strategy. Another major bilateral donor involved in the installation of potable water systems in rural Tunisia, the Kreditanstalt für Wiederaufbau (KfW), expressed its support for the WUA concept and stipulated that associations would be formed in communities where KfW-funded water systems were planned and in others already operating.

1.2 Purpose of the Action Plan

The objective of the Action Plan is to assist the Government of Tunisia (GOT) to develop an operational national strategy for the formation and monitoring of viable water user associations. The Action Plan consists of a variety of activities which will help define the methodology, processes, and materials needed to begin shifting responsibility for the management and exploitation of water systems in rural Tunisia from the central government to local communities. Its purpose is not simply to provide a mechanism for the transfer of water costs, but to help the GOT realize a national policy that nurtures the organizational structures necessary for communities to independently manage complex potable water systems and to serve as platforms for future locally initiated community development activities.

Broad guidelines for the Action Plan were established at a meeting held on October 10, 1989, with representatives from GR/Tunis, CRDA/Kairouan, CRDA/Kasserine, USAID/Tunisia, and KfW (see Jennings report). The present report builds upon these guidelines and details the various steps to be taken over the life of the Action Plan, culminating in a presentation of the draft text of a national strategy.

1.3 Team Methodology

The Action Plan was prepared during a two-week period by a three-person team representing the Water and Sanitation for Health Project (WASH), Irrigation Support Project for Asia and the Near East (ISPAN), and Systems Approach to Regional Income and Sustainable Resource Assistance Cooperative Agreement (SARSA). The methodology for developing an Action Plan involved the review of reports and discussions with concerned staff in Genie Rurale (GR), and visits to field sites in Kasserine and Kairouan Governorates.

The team initially met with relevant officials in GR/Tunis to elicit their views on actions needed to develop a national strategy and to achieve a common understanding of the goals.

A four-day field trip was then made to water projects in Kasserine and Kairouan Governorates. These Governorates were selected because they have both created WUAs, though the approach used in USAID-funded Kasserine has been modified in Kairouan. Discussions about the approaches to forming WUAs were held with GR staff in both Governorates to identify the types of studies, training activities, workshops, and procurement required to formulate a national strategy. The team held discussions with the CRDA directors, community organization specialists, and GR technicians and in Kasserine, met with representatives of the Ministry of Health. In both Governorates, the team visited selected WUAs to get a general understanding of issues involved in their creation and operation. Discussions were held with WUA members and WUA officers (presidents, treasurers, and pump operators).

A major task was to establish coordination of the Action Plan with potable water projects financed by KfW. To ensure collaboration, the team held discussions with representatives of KfW and jointly visited both Kasserine and Kairouan Governorates. The team also held discussions about the Action Plan with KfW in Tunis to identify concrete steps needed to coordinate activities.

Following the field visit, the team reviewed a preliminary outline of the Action Plan with USAID, CRDA/Kasserine, and GR/Tunis to obtain its views and make changes where needed.

1.4 Collaboration with KfW

The Action Plan incorporates USAID's and KfW's complementary interests in assisting the GOT to develop WUAs in Tunisia. During the same timeframe that USAID will be helping the GOT to develop a method and process for creating WUAs on a national scale, KfW will be financing approximately 80 potable water projects throughout Tunisia. Under KfW's agreement with the GOT, new projects cannot commence until WUAs are formed. Given USAID's and KfW's complementary activities, it was agreed that specific steps are needed to ensure close coordination between the two donors.

KfW has agreed to allocate between approximately 950,000 and 2 million Deutschemarks for collaborative work under the Action Plan (variability of funds is due to different ways of figuring amount devoted to WUAs). Their funds will be used for promotion of WUAs in project areas they are supporting, including procurement of items such as vehicles for community organization specialists in each Governorate, computers, and publication of training materials. Their funds may also be allocated to support long-term technical assistance to GR/Tunis for coordination of the Action Plan.

KfW-supported project activities will provide opportunities to learn more about the process of creating WUAs, which will assist in developing a national strategy. Under the Action Plan,

USAID will finance the development of training materials that can be tested in KfW sites. At the same time, KfW sites will serve as pilot projects for testing institutional approaches to creating WUAs.

Close collaboration throughout implementation of the Action Plan is vital to developing a successful nationwide strategy for WUA creation. The description of the Action Plan that follows takes into account the complementary interests of the two donors.

Chapter 2

SUMMARY DESCRIPTION OF ACTION PLAN

2.1 Key Issues to be Addressed by the Action Plan

The activities proposed in the Action Plan are intended to address certain key issues in formulating a national strategy for water user associations. The team believes that GOT success in addressing these issues will greatly enhance the chances for successfully establishing a nationwide approach to rural water operation and maintenance with beneficiary participation. During the first week of the consultancy, the team identified the following issues:

1. At present, the division of responsibilities for operation and maintenance between the WUAs and the Governorate offices of GR has not been clearly defined. It ranges from the WUAs being responsible only for preventive maintenance to being responsible for all repairs under 100 TD. Some GR staff have stated that eventually the WUAs should take complete responsibility for all maintenance. It appears that the WUAs also have different understandings of their maintenance responsibilities, with some thinking they are responsible only for changing the oil and filter. To achieve a national policy for O&M, it will be important to determine the level of responsibility WUAs can and will take, the approach needed to ensure that level, and the timing for transfer of responsibility to WUAs.
2. The true cost of creating, training, and monitoring WUAs is not known. It is commonly believed that the approach used in Kasserine costs more than the approach used in Kairouan. The team believes that the costs may in fact be very similar, if not more, in Kairouan. This will require a much closer look than was possible during this consultancy.
3. The financial management system devised by GR/Tunis may take away some of the incentives that communities have to contribute regularly. This system requires that WUA funds be controlled by an official in the regional Ministry of Finance office. Another option is that WUAs have complete control over their funds and be allowed to open their own bank account. The effectiveness of the system currently envisioned should be examined.
4. A workable system for incorporating hygiene education has not yet been developed. Kasserine has developed an approach using community health workers, while Kairouan relies solely on regional personnel from the Ministry of Health. Given the importance of hygiene education in realizing health benefits, it will be important

during the Action Plan to work out a system for coordination with the Ministry of Health.

5. Many existing WUAs use water systems for both potable water and irrigation. These mixed systems may create different incentives for beneficiary participation from systems used purely for potable water. Irrigation may also lead to inequities in what users pay, illegal connections, and much higher demands for water than was originally anticipated by the system. The full effects of irrigation need to be examined to determine what modifications should be made to accommodate that use but will not be covered by this Action Plan.
6. Standardized materials for training the WUAs do not exist. In Kasserine, CRDA staff have developed some training materials for presidents, treasurers, and community health workers, but they have not been updated nor do they exist in a form which other governorates can easily use. In Kairouan, CRDA staff have developed some excellent self-instructional materials for WUA treasurers. Standardized training materials need to be developed for pump operators, presidents, and treasurers of the WUAs, and for hygiene educators.
7. Current staff in the CRDAs responsible for creating WUAs do not possess the skills to train the various groups in the community critical to the success of a WUA. Training must be practically oriented and must be more than talking to the communities about their responsibilities. Training is one of the keys to the creation of effective WUAs.
8. The work of creating WUAs demands skills and background in community organization and community development. GR does not have staff currently on board with this expertise, and has no promotional track for individuals with a social science background. If it is too administratively complex to create such a track, then existing personnel will have to be retrained to be community organization specialists. These options need to be examined more closely. Possibilities of "seconding" people from other Ministries should be considered.
9. Although the GOT has made a clear policy decision to pass on most of the responsibilities for managing rural water supply systems to WUAs, there is as yet no agreement on which approach is the most effective. Some believe passionately that the approach in Kasserine, which is based more on the principles of community development, is the way to go. Others believe just as strongly that the more straightforward approach focused on cost recovery used in Kairouan is more practical and just as effective as in Kasserine. Clearly a closer look is called for.
10. GR will need more personnel to implement the national strategy both in Tunis and the Governorates. The personnel is likely to come from existing staff who will need

to be retrained. The extensive training needs, legalization process, and technical support to the Governorates will require more full-time staff than at present. The sheer number of WUAs that will be created in the coming years will increase the current workload significantly both in Tunis and in the Governorates. Staff in both Kairouan and Kasserine echoed the same theme: we do not currently have enough staff to do the job. Exactly what the organizational structure in GR/Tunis and in the CRDAs should be is one of the issues that should be looked at in the Action Plan.

11. The community organizational structures introduced with WUAs have the capacity to undertake more community development activities than at present. Understandably, many of those involved with WUAs are caught up in the specific tasks necessary for their legalization and functioning. Other possibilities offered by the community organizing principle and its potential for sustaining WUAs need to be addressed.
12. To achieve a national strategy, GR staff will need to be sensitized to the issues involved in WUA creation, and techniques for marketing the concept will need to be developed. These techniques should be looked at in the Action Plan.

2.2 Overview of the Action Plan

The Action Plan involves five components that address these issues: (1) applied studies and consultancies, (2) pilot projects, (3) training, (4) procurement, and (5) development and finalization of the strategy. Each component has a number of activities that will be carried out over a period of approximately 18 months. It is anticipated that activities will commence as soon as possible, preferably by June 1990, and will end by December 1991.

Each activity builds upon others and is designed to follow in a logical sequence. It is important that this sequence be maintained where feasible. For example, training materials targeted for the community level will need to be developed before the training of trainers occurs. An 18-month timeline showing the schedule of all activities follows on the next page (Table 1).

The Action Plan includes a mid-term workshop around February 1991 to provide an opportunity for decision makers to assess progress to date and review initial outlines for the draft strategy test. Additionally, a number of seminars at strategic times are planned to assess results of specific training activities and studies. Development and finalization of the strategy should take place from October to December 1991, completion of a draft strategy document, and a national seminar for review of the document.

TABLE 1
18 MONTH TIMELINE
ENDING DECEMBER 1991
ACTION PLAN FOR THE DEVELOPMENT OF THE NATIONAL STRATEGY FOR WUAS
IMPLEMENTATION SCHEDULE

ACTIVITIES	June		3	4	5	6	7	JAN		10	11	12	13	JULY 1991		16	17	18	DEC 1991 19
	1	2						8	9					14	15				
1. APPLIED STUDIES																			
A. COMPARATIVE ANALYSIS																			
B. COST/BENEFIT																			
C. WATER SYSTEM MAINTENANCE POLICY AND PROCEDURES																			
D. INSTITUTIONAL ANALYSIS																			
E. MIS DEVELOPMENT																			
2. PILOT PROJECTS																			
A. MONITORING KFW SITES																			
B. RAPID ASSESSMENT																			
3. TRAINING																			
A. ASIAN STUDY TOUR																			
B. MATERIALS DEVELOPMENT PUMP OPERATORS PRESIDENT/TREASURER COMMUNITY HEALTH																			
C. TRAINING OF TRAINERS ENGINEERS COMMUNITY ORGANIZATION SPECIALISTS REGIONAL HEALTH TEAM																			
D. REFRESHER COURSE																			
E. SOCIAL MARKETING																			
F. EVALUATION OF TRAINING																			
4. FINALIZATION OF STRATEGY																			
A. MID-TERM SEMINAR																			
B. PROCEDURES MANUAL																			
C. DRAFT NATIONAL STRATEGY																			
D. NATIONAL SEMINAR																			

NOTE: ACTIVITIES 4, C AND D, WILL BE FINANCED WITH OTHER RESOURCES AND WILL NOT BE COVERED UNDER THE RURAL POTABLE WATER INSTITUTIONS PROJECT

KfW has agreed to provide all major materials such as vehicles and computers as part of their collaboration with USAID. Details can be found in KfW documents. Since USAID will not be responsible for major procurement, this component is not included in the Action Plan schedule.

An 18-month timeframe for the Action Plan would require a nine-month extension of the project completion date from March 1991 to December 1991. In April 1990 a decision was taken by USAID concerning a PACD extension for the Rural Potable Water Institutions Project. In order to complete as much of the Action Plan as possible, the PACD will be extended until September 30, 1991, thus covering 15 months of the proposed time period. The final two activities, preparation of a draft text of the national WUA strategy and the national seminar, will be financed with other resources.

If the project completion date remains March 1991, the following major changes would occur:

- The monitoring of KfW sites would be shortened by half.
- The social marketing activity would have to take place a few months earlier than anticipated or could possibly be dropped.
- There would be insufficient time to evaluate the effectiveness of the training.
- The activities under the development and finalization component, except for the mid-term seminar, would not be accomplished.

If a six-month extension is agreed upon, the major changes would be a shortening of the monitoring tasks to allow time to analyze the results, and dropping the activity under the development and finalization component.

2.3 Summary Description of Each Component in the Action Plan

2.3.1 Applied Studies and Consultancies

This component of the Action Plan addresses some of the long-range, more complicated issues that the GOT faces in developing a national strategy. One of these issues is the identification of an approach to WUA formation. The team believes that a comparative analysis of the different approaches currently being used in Tunisia will result in conclusions and recommendations for an approach that will lead to the formation of sustainable WUAs. A second major issue which will be addressed is the determination of a cost-effective strategy

for the government. This strategy must take into consideration the willingness and ability of communities to financially support the operation and maintenance of complex rural water systems, the true cost of the different approaches to creating WUAs, and the division of responsibilities for operation and maintenance between the different actors in each Governorate.

A third issue is the determination of the organizational changes needed within GR to create viable WUAs on a national scale. The identification of an appropriate structure in GR/Tunis and the CRDAs is key to providing the necessary support. A fourth issue to be addressed in this component is the need for ongoing monitoring of WUAs at the Governorate level to ensure that problems are identified and corrections made in a timely manner. Development of an MIS will be a valuable tool for GR staff and allow more complete use of the computers provided by KfW for each Governorate. The final issue is to assist GR in developing a policy for maintenance and a procedures manual for use in each Governorate.

These studies and consultancies should suggest answers to some of the more difficult issues in creating WUAs on a national scale.

2.3.2 Pilot Projects

The primary activity in this component is the monitoring of the approaches used in KfW project sites. KfW is entering into the third phase of a project to establish potable water systems in rural Tunisia. The KfW-funded project has now adopted an approach that incorporates the formation of WUAs in systems previously financed by KfW as well as in systems to be built under the new project. The team is proposing to monitor the process of creating a selected sample of WUAs in KfW sites. The monitoring, over a 14-month period, will provide a better understanding of the processes of establishing functioning WUAs in different regions of Tunisia. Various studies and evaluations have generated a significant amount of information about the process of creating operating WUAs in Kasserine and North Gafsa, but far less is known about the process and its effects elsewhere. The objective of this monitoring program is a better understanding of regional differences in WUA formation.

The second activity in this component is a rapid assessment of WUA capacity to undertake community development activities. This capacity is being demonstrated in Kasserine under the USAID-funded project. This activity will review the progress to date in Kasserine, identify the types of community development activities that are feasible for WUAs, and make recommendations for expanding them.

2.3.3 Training

The overall purpose of this component is to develop training materials and create a group of trainers who will be capable of meeting the increasing training demands as the pace of formation of WUAs quickens. Training materials will be developed and tested and trainers trained under the Action Plan who can provide support to the KfW pilot project sites and other sites as determined by the GOT. By the completion of the Action Plan, GR should have a set of training materials for use in training WUAs, and skilled trainers to conduct the training programs on a national scale.

This component will consist of 10 distinct activities. It will include development of materials for conducting short training programs for a variety of target groups including pump operators; presidents, treasurers, and members of the WUAs; and community health workers. Three groups of trainers will be trained: engineers and technicians for training pump operators; community organization specialists for training presidents, treasurers, and community members of WUAs; and health agents for training community health workers. One activity is specifically designed to develop materials for a national social marketing campaign of WUAs. This may involve posters, radio spots, and other forms of publicity.

In addition, the training component includes a study tour in several Asian countries for five high-level GOT officials. These countries have been implementing a decentralized approach to the management of water systems. A study tour will offer the opportunity to learn from the experiences of these countries, and provide a broader understanding of the kind of national-level support needed to implement a strategy for WUAs.

Towards the end of the training plan, training activities will be evaluated to determine how they have contributed to the formation and operation of WUAs. This activity will assist in finalizing a training approach in the national strategy.

2.3.4 Procurement

KfW will be responsible for the acquisition of equipment under the Action Plan. Specifically, KfW will provide both regular and all-terrain vehicles and computers, and also fund the publication of the various training materials. The exact number of vehicles and computers is specified in the loan agreement between KfW and the GOT.

2.3.5 Development and Finalization of the Strategy

This component consists of four distinct activities for the overall monitoring and development of both the Action Plan and the strategy itself. None of the activities in this component addresses a specific issue. The first is a mid-term workshop to review progress to date in implementing the Action Plan and to identify any mid-course corrections. The second is completion of a procedures manual for the creation and operation of WUAs. This will be an operationally oriented Governorate-level manual intended for use in the field and will allow for some standardization in approaches in different regions. This manual will be written towards the end of the Action Plan, following the completion of the studies and pilot project monitoring.

The third activity is the drafting of the national strategy itself. The strategy document will lay out a framework for creating WUAs and take into account all the lessons learned during the implementation of the Action Plan. The last activity will be a national seminar for decision makers in which they will have an opportunity to make final comments on the strategy and approve it. The seminar is also intended to serve as a kickoff event for implementing the strategy. The final two activities will require other sources of financing. Table 2 provides a summary of the technical assistance required.

2.4 Monitoring and Coordinating the Action Plan

The Action Plan consists of 21 separate activities in addition to the support and project funding provided by KfW. It is essential that an individual be responsible on a full-time basis for monitoring and coordinating the various activities. An Action Plan coordinating committee should also be established to monitor the Action Plan. Members should come from USAID, GR/Tunis, CRDA/Kasserine, and KfW (when in-country). An office will be made available at GR for all outside consultants. The team believes that, at a minimum, one full-time GR/Tunis staff person will be required. Below is a tentative list of the responsibilities of such a coordinator:

- briefing and orienting consultants when they arrive
- organizing consultant visits, including notifying appropriate Governorate officials and setting up meetings
- organizing training events, including selection of training sites, payment of per diem, notification of participants, arrangement for food and lodging, etc.
- acting as a co-trainer for some of the workshops

- reviewing consultant reports
- debriefing consultants at the end of their assignments
- providing direct technical support to the Governorates on WUA creation
- coordinating the incorporation of hygiene education activities with the Ministry of Health
- assisting in drafting the national strategy
- assisting in drafting the procedures manual for creating WUAs
- in general, monitoring the implementation of the Action Plan and suggesting mid-course corrections

If a full-time coordinator cannot be assigned by GR/Tunis, the USAID project should consider funding a Tunisian for that role for the duration of the Action Plan.

In addition, the team believes that two full-time staff members will be needed to work only on WUA issues in each Governorate. The KfW project and increasing WUA activity in other Governorates will clearly require staff who are trained and have time to devote to creating WUAs.

Table 2

Summary-Technical Assistance

Activity	Timing	Level of Effort	Consultants Required
1. APPLIED STUDIES			
A. Comparative Analysis	August-September 1990	17 weeks total: 5 weeks each in Tunisia	<ul style="list-style-type: none"> • Social scientist experienced with WUAs • Social scientist with strong economics background • Social scientist or management degree, with experience in rural research (Tunisian)
B. Cost-Benefit Study	September-October 1990	10 weeks total 4 weeks each in Tunisia	<ul style="list-style-type: none"> • Economist or financial analyst with experience with WUAs • Economist or related field (Tunisian)
C. Water System Maintenance Policy and Procedures	November 1990-April 1991	10 months total: 2 months int'l consultant 8 months local consultants	<ul style="list-style-type: none"> • Maintenance engineer • Maintenance engineer (Tunisian) • Writer/illustrator (Tunisian) • Trainer (Tunisian)
D. Institutional Analysis	January 1991	6 weeks total: 3 weeks each in Tunisia	<ul style="list-style-type: none"> • Human resources development specialist • Social scientist with experience in institutional assessment (Tunisian)
E. MIS for monitoring WUAs	March 1991	8 weeks total 4 weeks each in Tunisia	<ul style="list-style-type: none"> • MIS specialist with experience in establishing data management systems • Computer specialist (Tunisian)

Activity	Timing	Level of Effort	Consultants Required
2. PILOT PROJECTS			
A. Pilot project to monitor WUAs	June 1990-September 1991	14 months total	<ul style="list-style-type: none"> • Project Coordinator • Social scientist with experience with WUAs • Social scientist with research experience (Tunisian) • Two research assistants with social science degrees (Tunisian)
B. Assessment of WUA capacity for community development	January-February 1991	6 weeks total: 3 weeks each in Tunisia	<ul style="list-style-type: none"> • Social scientist with community development background • Community development expert (Tunisian)
3. TRAINING			
A. Asian Study Tour	August-September 1990	8 weeks total: 3 weeks each consultant for study tour itself	<ul style="list-style-type: none"> • Coordinator with experience with WUAs • Logistics coordinator
B. Development of Pump Operator Training Program	July-August 1990	5-10 weeks total: 5 weeks in country	<ul style="list-style-type: none"> • Instructional technologist • Engineer (Tunisian consultant if not provided by GR)
C. Development of WUA Training Program	June-July 1990	8 weeks total: 4 weeks each in country	<ul style="list-style-type: none"> • Training specialist with experience in WS&S • WUA specialist, with social science degree (Tunisian)
D. Development of Training Program for Hygiene Education	September-October 1990	3-5 weeks	Health educator with experience in training and water and sanitation

Activity	Timing	Level of Effort	Consultants Required
E. Training of Trainers: Engineers and Technicians	October-November 1990	10 weeks total: 5 weeks each in Tunisia, two-week workshop	<ul style="list-style-type: none"> • Training specialists - 2 • Engineer (to be provided by GR)
F. Training of Trainers: Community Organization Specialists	November-December 1990	10 weeks total: 5 weeks each in Tunisia, two-week workshop	<ul style="list-style-type: none"> • Training specialist • Training specialist with experience in community development • Community organization specialist (to be provided by GR)
G. Training of Trainers: Hygiene Education Specialist	January-February 1991	10 weeks total: 5 weeks each in Tunisia, two-week workshop	<ul style="list-style-type: none"> • Training specialist • Health educator with training skills • Health educator (to be provided by MSP)
H. Refresher Course	June 1991	10 weeks total: 5 weeks each in Tunisia, 3 3-day workshops	<ul style="list-style-type: none"> • Training specialists (2)
I. Social Marketing	June 1991	6 weeks total: 3 weeks each in Tunisia	<ul style="list-style-type: none"> • Social marketing expert with experience in water and sanitation • Social marketing expert with experience in production (Tunisian)
J. Evaluation of Training	July 1991	8 weeks total: 4 weeks each in Tunisia	<ul style="list-style-type: none"> • Training evaluation specialist • Social scientist with community development experience (Tunisian)

- Persons provided by the GOT are not included in "Level of Effort."

Activity	Timing	Level of Effort	Consultants Required
4. <u>FINALIZATION OF STRATEGY</u>			
A. Mid-term workshop	February-March 1991	3 weeks total	<ul style="list-style-type: none"> • Workshop facilitator • Social scientist with experience with WUAs
B. WUA Procedures Manual	July-August 1991	4 weeks	<ul style="list-style-type: none"> • WUA specialist with experience writing guideline documents
(Following funded by other means than Rural Potable Water Institutions Project)			
C. Draft National Strategy	September-October 1991	4 weeks	<ul style="list-style-type: none"> • WUA specialist
D. National Seminar	November-December 1991	2 weeks	<ul style="list-style-type: none"> • Facilitator

Chapter 3

CONCLUSIONS AND RECOMMENDATIONS

3.1 Conclusions

1. The GOT has already made significant progress in creating WUAs. The legislative framework which is in place and the experience in Governorates such as Kasserine and Kairouan provide an excellent base of support for developing a national strategy. WUAs are functioning, some of them quite well, demonstrating that the concept is viable in Tunisia.
2. Some major questions, which are addressed through a series of activities to be undertaken in this Action Plan, remain to be resolved. Successful implementation of the Action Plan should provide the information needed for decisions about the approach to follow in the national strategy.
3. The close collaboration between KfW and USAID, along with the support and interest of the GOT, has resulted in a much more comprehensive Action Plan than was originally anticipated. The Action Plan is an excellent example of close donor collaboration to enhance the likelihood of success in achieving a viable national strategy for WUAs.

3.2 Recommendations

1. GR/Tunis as soon as possible should name a full-time person to coordinate and monitor the Action Plan.
2. GR/Tunis should assign two people per Governorate (one community organization specialist and one engineer) to work full time on creating and training WIJAs in KfW project sites.
3. USAID/Tunisia should engage a consultant to spend one week in Tunisia identifying individuals and firms capable of fulfilling the Action Plan requirements for local resources.
4. USAID/Tunisia as soon as possible should do the necessary administrative work for contracting the various activities. The first activities ideally should start in June 1990.
5. Efforts should be made to follow the Action Plan in the sequence outlined on the timeline schedule.

Section II

Scopes of Work

Scope of Work

Comparative Study of Approaches to WUA Formation

General Background

As part of an effort to develop a decentralized institutional approach to the operation and maintenance of potable water supplies, a USAID-funded project in Kasserine Governorate has been developing a set of methods for creating and fostering Water User Associations (WUA). Similar methods are also being developed in Kairouan and other governorates. Despite current levels of experience in different parts of the country, a clear sense of the approach that will lead to effective and sustainable WUAs has not yet been identified. The purpose of this study is to compare approaches developed to create WUAs, review lessons learned, and identify specific actions that can lead to greater success.

This comparative analysis is the first of a series of studies to be undertaken as part of the Action Plan to identify an appropriate model for adoption as a nationwide strategy. The study will involve detailed analysis of approaches to create and foster WUAs in Kasserine, Kairouan and selected other governorates in Tunisia and achievements to date. It will result in conclusions and recommendations for an approach that will lead to successful formation of sustainable WUAs at a national level.

Tasks

In accordance with the purpose of this assignment, a team of three consultants will complete the following tasks and address the following issues:

1. Initially, the consultants will review AID documents and reports on WUA formation in Kasserine and available reports on WUAs in other parts of the country. The team will also review current WUA legislation which is the basis for forming WUAs.
2. Although the study will compare approaches in Kasserine and Kairouan Governorates, it will also examine approaches in two or three additional governorates in which WUA formation is actively underway. The consultants will, in collaboration with CRDA/Kasserine and GR/Tunis, select these governorates following the initial review of literature.
3. The consultants will hold discussions with governorate staff to examine CRDA's approaches to fostering WUAs. Issues that will be addressed include:

- (a) the timeframe used to achieve current status of WUAs, staff assigned as WUA specialists, and their level of effort to promote WUAs (manpower, frequency of contact with communities, background and skills of staff)
 - (b) approach to developing WUA responsibility for O&M
 - (c) approach to monitoring WUA activities, including financial monitoring and developing financial independence of WUAs
 - (d) logistical arrangements to allow WUA specialists to respond to actions needed quickly and effectively (e.g., vehicle use and time available)
 - (e) staff efforts to involve beneficiaries in design and implementation of water points and site selection
 - (f) methods for working with different types of communities and ensuring flexibility in approach
 - (g) approach toward hygiene education and inclusion of women
4. In collaboration with GR in each governorate, the consultants will also select a sample of at least two successful and two unsuccessful WUAs. The consultants will visit these WUAs to assess the effect of each approach on the creation of WUAs. The consultants will assess the effectiveness and sustainability of WUAs in a comparative framework. They will identify the status and trends in WUA operation and maintenance responsibilities, trends in fee collection, WUA decision making, and WUA capacity to only manage water or undertake other community development activities as well.
 5. The consultant team will then identify differences in approaches and their effect on WUA formation. The draft report will highlight those approaches that lead to greater user participation in O&M and recommend changes or modifications to further enhance the role of WUAs.
 6. The consultants will present their findings and conclusions at a meeting with CRDA/Kasserine, GR/Tunis, USAID/Tunisia and, if possible, KfW. Comments and suggestions will be gathered and incorporated into the final report, which will be submitted to USAID/Tunisia with copies to CRDA/Kasserine, GR/Tunis and KfW.

Personnel

The study will be undertaken by a team of three consultants two expatriate and one Tunisian—with the following qualifications:

1. Advanced social science degree (rural sociology, anthropology); experience with water user associations in Tunisia or other Mediterranean countries preferable; previous experience with the USAID-funded project in Kasserine desirable.
2. Advanced degree in social science, preferably with strong economics background; experience in water user participation in Third World essential, preferably in Tunisia or elsewhere in Asia.
3. Tunisian expert with advanced social science or public management degree, experienced in rural research in development project context. Knowledge of potable water or irrigation would be useful.
4. Fluent French or Arabic.

Level of Effort

The required level of effort will be approximately six weeks. The first week will be spent in a two-day TPM in Washington and travel. Five weeks will be spent in Tunisia. During the first week in country, the team will review reports and select governorates for field studies. The following three to four weeks will be spent visiting GR staff and WUAs in selected governorates. The final week in country will be spent preparing the draft report and presentation to CRDA/Kasserine, GR/Tunis, KfW and USAID.

Scope of Work

Cost-Benefit Analysis of WUA Creation and Operation

General Background

The purpose of this study is to conduct cost-benefit analyses as part of an Action Plan to gather and prepare the information necessary to formulate a National Strategy for Water User Associations (WUAs) in Tunisia. One of the most crucial tasks of the Action Plan is to determine a cost-effective strategy for the government to execute, taking into consideration the willingness and ability of the individual communities to financially support the operation and maintenance of complex water systems. Various studies and evaluations of the USAID-supported Potable Water Project in the Kasserine and North Gafsa Governorates have generated a significant amount of information about the costs of creating, monitoring, and operating WUAs. Similar processes have begun in other governorates, but these have not been subject to the same degree of analysis. As a result, the overall costs and benefits are not yet known.

The present study has three primary purposes, corresponding to three different tasks. The first is to analyze the costs and benefits associated with the different approaches taken so far in the formation and ongoing support of WUAs. A second purpose is to develop a model that will help define the different responsibilities of the various actors in the operation and maintenance of complex and costly potable water systems. The GOT has not yet determined the degree of maintenance responsibilities the WUAs are to take over. Before this can be defined, studies must be completed to provide options based on the willingness and ability of WUAs to assume responsibility for their water systems. It is unclear whether some level of government subsidy for expensive repairs will continue to be necessary for systems designed solely for potable water. The final purpose is to re-examine the willingness and ability to pay for different maintenance programs, incorporating data collected from communities where the WUAs also administer water for irrigation.

The cost-benefit analyses will immediately follow the study titled: Comparative Study of WUA Formation. This applied study will be conducted as part of the Action Plan and should serve as background information on the present status of WUAs in Tunisia.

Tasks

1. The expatriate consultant will participate in a one-day information gathering and planning meeting in the United States organized by individuals having long-term experience with the various Tunisia potable water projects and an understanding of the overall objectives of the Action Plan.

2. The consultants will review the reports and data already generated by the project in Kasserine and North Gafsa Governorates to assess what additional information is needed from this region. Documents containing relevant socioeconomic information and descriptions of regional production systems should also be consulted for background reference on regional diversity.
3. In collaboration with GR/Tunis, the consultants will select a sample of governorates to visit in the southern, central, and northern regions of Tunisia. The sample should include at least four governorates, with each of the regions represented. The selection process will concentrate on governorates that have achieved the greatest degree of advancement in the creation of functioning WUAs.
4. Field visits will be made to each of the selected governorates and discussions held with the individuals responsible for implementing the program to create WUAs. As much detail as possible will be collected on the costs of the overall program. Specific attention will be paid to determining the costs per officially established WUA in that governorate. Costs should include, but not be limited to, those associated with personnel, transportation, and training.
5. At each governorate, the consultants will collect information on the annual expenditures by the various government agencies charged with water system maintenance. To as great a degree as possible, the consultants will determine the difference between operation and maintenance programs before and after the creation of WUAs. Discussions will be held with those responsible for water system maintenance at the regional level to identify the existing policy for defining the responsibilities of the WUAs and of government agencies.
6. In collaboration with governorate-level officials, a selected sample of at least four WUAs will be chosen for site visits. The selection should be limited to WUAs with existing water systems so that the operating and maintenance costs can be obtained. The sites selected should also include a mixture of systems devoted only to potable water and to both potable water and irrigation.
7. Field visits will be made to each of the chosen sites and discussions held with WUA officials and community members to determine the water system's annual operating and maintenance costs. Data on the amount association members pay for water will also be collected. Rapid appraisal techniques will be employed to determine the willingness and ability of community members to pay for water.
8. Based on findings from the different governorates, the consultants will report on the costs and benefits associated with the creation and ongoing monitoring of WUAs.

9. In collaboration with GR/Tunis and CRDA/Kasserine, the consultants will devise a hypothetical model that demonstrates the degree of responsibility WUAs can be expected to take in the operation and maintenance of systems utilized only for potable water. The range of possibilities incorporated in the model will range from WUAs being responsible exclusively for the daily maintenance costs of the system, with the government taking on all other costs, to the WUAs being responsible for all maintenance costs.
10. A similar model demonstrating the level of responsibility for operation and maintenance will be developed using the information on WUAs that have systems for both irrigation and potable water.

Personnel

Two consultants will be required for this task, an expatriate and a Tunisian. The expatriate consultant should have an advanced degree in economics or agricultural economics and extensive experience with beneficiary participation/WUAs in the potable water and/or irrigation sectors. Third World experience is essential, preferably in Tunisia or other parts of Africa, the Middle East, or Asia. Fluent French or Arabic is required. The Tunisian consultant should have a degree in economics or related discipline and have extensive experience with Tunisian government financial practices and familiarity with potable water or irrigation.

Level of Effort

The required level of effort will be a total of ten weeks. Both consultants will spend four weeks in Tunisia, and the expatriate consultant will finalize the data analysis and report in the United States in a two-week period. The structure and contents of a draft report will be presented prior to the expatriate consultant's departure from Tunisia. A final report will be submitted to GR/Tunis, CRDA/Kasserine, KfW, and USAID/Tunisia.

Scope of Work

Institutional Analysis

General Background

The purpose of this study is to identify the institutional changes needed within Genie Rural (GR) to create viable and effective Water User Associations (WUAs) on a national scale in Tunisia. This study builds upon earlier studies undertaken in the Action Plan, most importantly the Comparative Analysis of Approaches to WUA Formation and the Cost-Benefit Analysis of WUA Creation and Operation. These studies will provide information on the various approaches to WUA formation in progress and their successes and weak points, as well as their financial costs and benefits.

Based on these studies and an assessment of needs and constraints in Tunisia, the institutional analysis will result in a final report which will include:

- identification of an appropriate institutional structure to form WUAs on a national scale, including identification of the complete array of staff, roles, and duties needed under the structure
- recommendations for procedures to implement the institutional structure on a national scale
- recommendations for physical resources and procurement required

Tasks

The following tasks will be completed under this assignment:

1. The consultants will review studies undertaken as part of the Action Plan and other related documents to become familiar with the approaches taken to WUA formation to date, costs of different approaches, and recommendations emerging from the studies.
2. The consultants will briefly visit the offices of GR in Kasserine, Kairouan and selected other governorates where WUA creation is actively in progress. The purpose of these visits will be to further understand the institutional changes involved in implementing the approaches.

3. The consultants will, in collaboration and discussion with GR/Tunis and CRDA/Kasserine, identify an appropriate institutional structure and study the human resources needed throughout Tunisia to undertake WUA formation on a national scale. The consultants will carefully take into consideration those financial, human resource, and logistical constraints voiced by GR/Tunis. The consultants will identify the following:
 - (a) number of Community Organization Specialists needed in each governorate to undertake supervision and formation of WUAs, including training
 - (b) skills and backgrounds required in these positions
 - (c) staff recruitment needs for Community Organization Specialist positions, including possible recruitment of new staff with social science backgrounds, retraining of in-house staff, or other alternatives
 - (d) clearly defined roles and responsibilities (terms of reference) for the positions of Community Organization Specialists
 - (e) reporting procedures to ensure timely and adequate flow of information, and mechanisms for coordination between Community Organization Specialists and staff in other government agencies (Health, PDR, SONEDE, etc.)
 - (f) staff responsibilities for training WUA representatives, pump operators, and community health workers
 - (g) short-term and long-term staffing needs to form WUAs and a general timeframe for possible phasing out of these positions
4. The consultants will review the new O&M staffing arrangements proposed for Kasserine Governorate by WASH consultants and identify any implications for staffing in other governorates. For example, if WUAs are to take on greater responsibility for maintenance, then additional training and more staff may be required in the short run.
5. In consultation with GR/Tunis, the consultants will review the need for long-term staff in GR/Tunis to coordinate and monitor staff activities in the governorates.
6. The consultants will also identify the human resources needed to ensure training of staff to work in each governorate. The consultants will identify the number and types of trainers needed, given the number of staff to be trained, their previous skill levels,

and backgrounds. The consultants will also identify an existing training institution as a possible candidate to sponsor training in the long run.

7. The results will be written in a draft report which will be reviewed by relevant GR/Tunis staff, CRDA/Kasserine, USAID, and, if possible, KfW. The report will clearly identify the institutional structure and full range of human resource needs to implement a national strategy. The consultant will arrange a meeting with key GR/Tunis staff to discuss the institutional approach and get their comments and suggestions.

Personnel

1. Tunisian with advanced degree in one of the social sciences (rural sociology, anthropology, political science or other); extensive hands-on experience in institutional needs assessment; experience in Tunisia or elsewhere in Africa, the Mediterranean, or Asia required.
2. Expatriate with extensive experience in human resource development planning for water supply projects. Experience in Tunisia or elsewhere in Africa, the Mediterranean, or Asia required.
3. Fluent French or Arabic.

Level of Effort

The required level of effort will be approximately three weeks. Following a TPM in Washington, the first two weeks will be spent in Tunis reviewing documents and discussing the objectives to the study with GR/Tunis and CRDA/Kasserine, and visiting government staff in selected governorates. The final week will be spent writing and finalizing the report, including meeting with GR/Tunis, CRDA/Kasserine, KfW, and USAID/Tunisia staff to discuss the outcome of this study.

Scope of Work

Development of a Management Information System (MIS) for Ongoing Monitoring of WUAs

General Background

Kreditanstalt für Wiederaufbau (KfW) of West Germany is entering the second phase of a project to establish approximately 80 new potable water systems in Tunisia. The systems are being implemented by the Genie Rural (GR) division of the Ministry of Agriculture. Following the progress achieved in the creation of functioning Water User Associations (WUAs) in Kasserine, Kairouan, and other governorates, the KfW-funded project has adopted an approach that incorporates the formation of WUAs where water systems are already functioning, as well as in the areas where new water systems are to be introduced. Included in the KfW potable water project are funds for vehicle and computer purchases to assist in project implementation. In principle, a microcomputer system will be installed at the GR offices in each of 23 governorates. One purpose proposed for the new computer systems is to help monitor the creation and ongoing technical assistance provided by GR to the regional WUAs.

Simultaneously, USAID is supporting an Action Plan to develop a national strategy for the formation and ongoing monitoring of WUAs in Tunisia. One component of the Action Plan is to develop a standardized database information system that can be incorporated into the national strategy to keep track of WUA creation and operation. The purpose of the Management Information System (MIS) consultancy is to assist the WUA Coordinating Committee at GR/Tunis develop a model database system that can be established at the different governorate branch offices. The dissemination of the database system to the governorates and training in its operation will be the responsibility of GR/Tunis.

At the time the Action Plan was written, KfW planned to provide a short-term consultant for about six months to develop a comprehensive MIS for all GR activities, including the monitoring of WUAs. If the KfW consultant is able to incorporate WUA monitoring into his or her scope of work, this task can be dropped.

Tasks

1. The expatriate consultant will participate in a one-day planning meeting in the United States conducted by a team planning coordinator familiar with the Tunisia potable water projects and the Action Plan strategy.

2. The expatriate consultant will work with a Tunisian firm or individual with considerable MIS experience and capabilities in utilizing Arabic language database software systems. The selected firm or individual will be contracted to participate in the remainder of the consultancy.
3. The two MIS consultants will meet with the individuals at GR/Tunis who will be responsible for WUA information systems to discuss their needs, capacities, and constraints.
4. A field visit to several governorates already involved in WUA monitoring will be arranged to determine the necessary database contents and report requirements.
5. Field visits to several functioning WUAs will be conducted and meetings held with WUA governorate staff to discuss the possibilities of generating reports at the governorate level that can be utilized in WUA operations.
6. In collaboration with GR/Tunis and CRDA/Kasserine, the consultants will develop a WUA MIS that can be practically disseminated and employed at the governorate level. Attention should be paid to design of simplified data entry screens and to incorporation of menu-driven report formats.
7. The MIS will be briefly tested, using a sample of information at one or more governorates to identify likely problem areas. Any difficulties encountered should be corrected before the end of the consultancy.

Personnel

1. An expatriate consultant with considerable experience in the design and operation of MIS in Third World nations. Preference is for an individual who has established database monitoring systems for beneficiary participation or WUA programs. Excellent French or Arabic is required.
2. A Tunisian individual, or firm willing to provide an individual, with extensive computer application skills and considerable experience in the use of Arabic language database software packages.

Level of Effort

The design of an MIS ready for use by governorate-level WUA formation and monitoring teams will require approximately eight weeks of effort. The two consultants will each spend four weeks preparing and testing the database system.

Scope of Work

Pilot Project to Monitor the Formation and Functioning of WUAs Created with KfW Support

General Background

Kreditanstalt für Wiederaufbau (KfW) of West Germany is entering into the third phase of a project to establish approximately 80 new potable water systems in Tunisia. The systems are being implemented throughout rural Tunisia by the Genie Rural (GR) division of the Ministry of Agriculture. Following the progress achieved in the creation of functioning Water User Associations (WUAs) in Kasserine, Kairouan, and other governorates, the KfW-funded project has adopted an approach that incorporates the formation of WUAs where water systems are already functioning, as well as in the areas where new water systems are to be introduced.

Simultaneously, USAID is supporting an Action Plan to develop a national strategy for the formation and ongoing monitoring of WUAs in Tunisia. The present pilot project will monitor a selected sample of WUAs created under the KfW-funded project. The objective is a better understanding of the processes of establishing functioning WUAs in different regions of Tunisia. Various studies and evaluations of the USAID-supported potable water project in the Kasserine and North Gafsa Governorates have generated a significant amount of information on the process of creating and operating WUAs in the central region of the country. Far less information is known about the process and its effects elsewhere. The purpose of this pilot project is to examine how the procedures for organizing WUAs are approached in different regions, and to observe whether the rural populations of various regions respond differently to involvement in WUAs. The pilot project will establish a mechanism to monitor WUAs in northern and southern Tunisia for the life of the Action Plan, while continuing to follow the progress of WUAs in the central part of the nation.

Tasks

1. In collaboration with officials from GR/Tunis, and if possible from KfW, the pilot project team will choose a selected sample of sites that will be monitored over the life of the study. The sample will be chosen from the list of sites already established under both phases of the KfW-funded project. A minimum of two sites in each of six governorates is preferred. The selected governorates should be proportionally distributed through the three regions of the country (north, south, and central). The sites selected should include, to the extent possible, a broad mix of communities located in those governorates. The sample should also represent the three possible levels of WUA formation: communities where water systems have been constructed

but WUAs are just being created; communities with functioning WUAs; and areas where both water systems and WUAs are beginning.

2. The pilot project team will prepare questionnaires to gather baseline socioeconomic and water use data at the community level that, together with qualitative interviewing, can be administered at regular intervals in the target communities. Attention should be paid to changes in water use, particularly among women, as well as the ability of the WUAs to promote beneficiary participation from all WUA members and the possibility of the introduced community organizational structures being utilized for other community development activities. The purpose of the surveys will be to monitor the effects of WUAs on the lives of rural populations from different regions. The survey will also assess the possible viability of the WUA mechanism for future community development purposes. The team will visit each WUA in the sample to repeat the data collection process at intervals of approximately three months.
3. At intervals of approximately three months the team will meet with individuals from the government agencies at the governorate level who are responsible for the formation and ongoing monitoring of the WUAs in the target communities. The purpose of these visits will be to elicit information on the status of WUA creation and any problems encountered over the past quarter.
4. Following each round of field visits to target WUAs and government agencies, the team responsible for the pilot project monitoring tasks will prepare a report summarizing the information collected and status of the pilot project. The report will be submitted to CRDA/Kasserine, GR/Tunis, USAID/Tunisia, and KfW.
5. At the end of the data collection phase, approximately three months before the end of the Action Plan, the team will prepare a final report that documents experiences in the creation and functioning of WUAs in different regions of the country. The final report will have two interconnected components. One is a review of regional differences in the approaches taken by the government agencies in the formation of WUAs and how successful their efforts have been. The other will address the different experiences of the communities in the evolution of their WUAs. The report will make recommendations on how regional socioeconomic differences need be taken into account in the final formulation of a national water user association strategy which is designed to be flexible.
6. The pilot project team will prepare and present a one-half to one-day seminar on its findings to representatives from GR/Tunis, USAID/Tunisia, KfW, and interested GOT agencies. A final report in English and French will be submitted to GR/Tunis, CRDA/Kasserine, USAID/Tunisia, and KfW.

Personnel

1. Pilot project coordinator—an expatriate coordinator familiar with the various Tunisia potable water projects and the overall Action Plan agenda to develop a national strategy for WUAs. Experience creating and coordinating longitudinal monitoring and evaluation programs is essential. Fluent French or Arabic is required.
2. Pilot project codirector—an expatriate consultant with an advanced degree in anthropology or rural sociology and extensive experience working with WUAs or beneficiary participation projects. The consultant must also have demonstrated experience in quantitative and qualitative data collection and analysis. Considerable Third World experience is essential, preferably in Tunisia, North Africa or elsewhere in semi-arid Africa. Fluent French or Arabic is required.
3. Pilot project codirector—a Tunisian consultant with an advanced social science degree, experience in the collection and analysis of qualitative and quantitative data, and demonstrated experience managing longitudinal field research programs.
4. Two Tunisian field research assistants, at least one of whom should be a woman. The research assistants should have at least bachelor's degrees in the social sciences. The preference is for graduate students in the social sciences who are ready to undertake a research project prior to degree completion.

Level of Effort

The pilot project to monitor the creation and functioning of WUAs in communities chosen for KfW-supported potable water systems will last the life of the USAID-funded Action Plan. The data collection should begin in June 1990 and continue through June 1991, three months before the revised PACD. Given this timetable, the following level of effort is envisioned:

1. The total level of effort for the pilot project coordinator will be one month. The coordinator will assist the team for two weeks in the initial design and implementation of the monitoring plan. An additional two weeks will be spent on data analysis, final report writing, and presentation of the pilot project's findings.
2. The expatriate pilot project codirector will be engaged for a total of 12 weeks. An initial visit of six weeks will be needed to select the sites, establish the data collection procedures, and participate in the initial site visits and survey tests. This will be followed by four weeks in the middle of the project to revisit all of the communities and assist in pulling together the preliminary data and structuring the final phase of

the monitoring. A final four-week visit at the end of the data collection phase will be devoted to assisting in data analysis and final report preparation.

3. The Tunisian pilot project codirector's level of effort will be 16 weeks. Twelve weeks will correspond to the times and tasks proposed for the expatriate codirector. An additional four weeks, spread out over the life of the pilot project, will be used to assist the field research assistants in the organization and preparation for field visits and to help write the quarterly reports.
4. The field research assistants will have a combined level of effort of 40 weeks. It is anticipated that one day per quarter will be spent at each of the 12 communities and an additional day at the six governorates, for a total of 18 days per assistant per quarter. Four quarterly visits over the life of the pilot project for the two researchers will require a total of 144 days, or 24 weeks. Each of the field research assistants will also participate in the initial four-week project preparation and the four-week final analysis and report writing, for an additional 16 weeks.

Scope of Work

Assessment of WUA Capacity for Community Development

General Background

A key component in the national strategy for creating viable and sustainable Water User Associations (WUAs) is the capacity of WUAs to act as a platform for other development activities. In the USAID-financed project in Kasserine Governorate, a number of legally formed WUAs are functioning well and beginning to undertake other community development activities such as construction of latrines and baths. USAID technical assistance has been provided to assist in this process and to help develop local women's associations as a counterpart to WUAs in which male community members participate. In other governorates such as Kairouan, the degree to which WUAs are beginning to undertake other development activities is less clear.

The purpose of this study is to assess WUA progress in undertaking a range of community development activities. The study will be a rapid assessment of experiences gained in the USAID-supported project in Kasserine as well as other governorates. It will result in a review of progress to date, identification of feasible community development activities for WUAs, and recommendations for successful methods to broaden the range of such activities.

Tasks

1. In collaboration with the WUA Coordinating Committee and the Community Organization Specialists in Kasserine, the consultants will identify WUAs that have demonstrated a capacity for undertaking community development activities, and will select four WUAs for a rapid assessment. At the time of this study, the consultants may also consider visiting WUAs in other governorates, depending on the degree of successful community development activities elsewhere. The consultants should consult the WUA Coordinating Committee for suggestions.
2. The consultants will visit each WUA during one day. The field visits will identify the potential impact of community development activities on the long-term sustainability of WUAs and reasons why some WUAs have successfully initiated community development activities. The consultants may pay particular attention to the role of irrigation in generating funds for community projects. Other issues to be addressed will include the types of activities WUAs are engaged in, future trends, and their financial capabilities to fund community activities. The assessment will also examine

progress in forming community-based women's groups and their contribution to viable and sustainable WUAs.

3. The consultants will also spend time discussing the approach to community development taken by project staff, particularly the Community Organization Specialists in each of the governorates visited. The level of effort and financial assistance required to foster a range of community development activities will need to be determined.
4. The consultants will prepare a descriptive report that assesses achievements to date and identifies reasons for success. The final report will also recommend actions on a national scale that are needed to develop WUA capacity for undertaking a range of community development activities.
5. The findings and conclusions will be presented for discussion at a meeting with GR/Tunis, CRDA/Kasserine, and USAID/Tunisia and a final report submitted in English and French.

Personnel

1. Expatriate with social science background and extensive hands-on experience working with beneficiary participation in community development; experience with potable water projects in Tunisia or elsewhere in Africa or Asia preferred; fluency in French or Arabic required.
2. Tunisian expert in community development with experience in rural research in development project context.

Level of Effort

The required level of effort for this assignment will be approximately six weeks, depending on recommendations about visits to governorates outside Kasserine. Following a one-day TPM in Washington, the expatriate will join the Tunisian expert in Tunis and spend the first two days there planning the field visits and reviewing documents. Two weeks will be spent conducting rapid appraisals at field sites. The remaining three days will be spent writing a final report.

Scope of Work

Asian Study Tour

General Background

In a number of countries throughout the Asian region, national governments have begun implementing a decentralized institutional approach to rural water operation and maintenance, focusing on beneficiary participation. The purpose of this study tour is to learn from those experiences and apply lessons learned to a national strategy for WUA formation in Tunisia. The Philippines, Indonesia, Sri Lanka and Nepal all offer an excellent opportunity to learn how beneficiary participation has been developed elsewhere, the problems involved, and techniques used to solve those problems and gain national-scale support.

An Asian study tour will provide Tunisian government officials with a broader understanding of the kinds of national-scale support needed to implement a strategy. It will also provide them with a comparative framework and a greater vision of attainable achievements. Finally, it will contribute to increased Tunisian government participation and awareness in developing and undertaking its national strategy.

Tasks

1. Approximately five or six GOT officials will participate in the study tour and will visit at least two Asian countries during a period of three weeks. To facilitate the tour, a consultant will make all the logistical arrangements, arrange invitations, and coordinate the program of activities during the tour. Two French speaking consultants will assist GOT officials during their visits.
2. The coordinator will write a final trip report, synthesizing lessons learned by participants about issues relevant to the national strategy.

Personnel

1. Expatriate to coordinate logistics and oversee the smooth running of the tour; experience working with Asian water user associations required; fluency in English and French.
2. Expatriate to assist in translation and logistical support while on tour; experience working with Asian water user associations desirable; fluency in English and French.

It is also anticipated that a U.S. firm experienced in participant training will be contracted to handle all participant costs, including travel and per diem. This firm will work in conjunction with another firm which will coordinate the substantive aspects of the tour and provide two individuals to accompany the Tunisians.

Level of Effort

The required level of effort will be approximately five weeks for the coordinator, who will spend approximately one week in pre-tour preparations. The coordinator, assistant, and participants will then spend approximately three weeks on the study tour. The consultant will spend one final week preparing a trip report. The second translator will participate only in the three-week study tour.

Scope of Work

Development of Training Programs for Pump Operators

General Background

The purpose of this task is to develop job aids and to design a short (1-2 days) introductory training program for pump operators.

Each water user association (WUA) has a pump operator who is responsible for operation and basic maintenance of the pump. Although the pump operator is usually someone from the community with limited mechanical background, occasionally the pump operator has mechanical skills. It is estimated that approximately 25% of the pump operators are literate in Arabic at a primary school level. Because most of the pump operators have limited skills in operating and maintaining pumps, training is required. The focus of the training programs at this point will be on the basic skills required to maintain the pump. As a clearer definition of maintenance responsibility is gained through the Action Plan, more training may be necessary.

Three kinds of pumps are used in rural water systems in Tunisia. The most common is a diesel pump, found in some areas in over 90% of the systems. The other types are electric pumps and electric pumps operated by a diesel-powered generator. These pumps do not all require the same level of maintenance, the diesel motor being by far the most difficult to maintain. Job aids will be required for each of the types.

There are several possible groups who will be training the pump operators. The most common source of trainers will be the engineers and technicians from GR regional offices. Another possible source is private sector firms such as APLICO who are contracted to provide this training.

Tasks

1. Become familiar with the background of the USAID-funded Potable Water Project in Kasserine and with the formation of WUAs for potable water in Tunisia.
2. Participate in a team planning meeting before departing for Tunisia.
3. Become familiar with the training materials and training programs which have already taken place in Tunisia, especially in Kasserine and Kairouan. It will be critical to collaborate with GR/Tunis and CRDA/Kasserine staff to ensure that ongoing activities in this domain are taken into consideration.

4. Determine the operation and maintenance tasks required for a pump operator for the three types of pumps used in rural Tunisia.
5. Based on the above list of tasks, develop job aids for the pump operators for the three types of pumps. These job aids should make minimal use of Arabic and be visually oriented. They should focus only on the essential tasks so they are not too lengthy. The job aids should be tested in the field before being finalized.
6. Design three short (1-2 days) training programs, one for each type of pump, for the pump operators. The training program should include, but not be limited to, the following:
 - introduction to the role and responsibilities of a WUA
 - overview of the responsibilities of a pump operator
 - basic operation
 - preventive maintenance, e.g., changing the oil, changing the filter
 - simple repairs

These short training programs should be practically oriented and focus on hands-on experience. The training designs should make direct use of the job aids for the pump operators. The training design should also take into account the possible different level of skills among the pump operators.

7. Write a brief report summarizing the work accomplished and the next steps.

End Product

The job aids should be prepared in camera-ready form. The consultant should also design the format, e.g., plasticized pages, mylar, etc. KfW will be responsible for printing the job aids.

The training programs should be designed for easy use by the trainers. The training program should be divided into sessions using the following format:

- session objectives
- overview of the session
- activities
- materials and handouts needed for the session

Personnel

One consultant will be required for this task. The consultant should be skilled in designing instructional materials for technical subjects. A degree in educational or instructional technology is preferred. The consultant should be fluent in French and have experience developing training materials in developing countries, preferably for illiterate people. It is assumed that the consultant will have access to subject matter experts in Tunisia during the consultancy. If not, an additional consultant will be required to provide technical input.

Level of Effort

Approximately five weeks will be required for this task.

Scope of Work

Development of Training Programs for the Water User Associations

General Background

Each water user association (WUA) includes a locally elected president, treasurer, and pump operator. It may also include other elected members of the administrative council, who often represent different clans that live in the area served by the water system. The president is generally responsible for running the WUA, while the treasurer keeps track of the finances including both budgeting and revenues.

The president is often chosen because of his level of education and standing in the community. In some cases the treasurer is chosen because of prior experience in bookkeeping. Both the president and treasurer are usually able to read and write Arabic at a basic level. Regardless of the background and educational level of the president and treasurer, some training will be required. As of February 1990, only Kasserine had organized training programs for the presidents and treasurers. Kairouan had, however, developed some very good materials for the treasurers to use.

In addition to the president and treasurer, the community members will require an orientation to the responsibilities of a WUA. This orientation should be organized so that it is consistent each time.

The trainers for all three target groups will be the engineer and community organization specialist at the governorate level who are responsible for creating WUAs.

The purpose of this task is to develop short training programs for the presidents, treasurers, and community members.

Tasks

1. Become familiar with the recent history of water user associations in Tunisia.
2. Participate in a team planning meeting before departing for Tunisia.
3. Become familiar with the materials developed in Kasserine and Kairouan for the training of presidents and treasurers.
4. Develop a one-day training program for the presidents of the WUAs. Topics which might be included are the following:

- overview of the legislation governing WUAs
- overview of the rural water supply context, including the responsibilities of the WUA, GR, Ministry of Health, etc.
- responsibilities of the president

The consultant should develop a simplified version of the WUA legislation as part of this task. It is possible that GR/Tunis will write this simplified version.

5. Develop a one-day training program for the treasurers of the WUAs. This training should include the following:

- preparation of a simple budget
- simple accounting procedures to keep track of collections and expenses
- calculation of user fees based on the costs of operations and maintenance

This training should involve practice in budget preparation and accounting. It is also expected that the Ministry of Finance will be involved in the design of this training so that the budget and accounting system is consistent with standard practices.

6. Develop a series of short talks for the community covering the following topics:

- purpose of WUAs
- law governing the creation of WUAs
- responsibilities of the WUA vis a vis the governorate
- financial responsibilities of the community members
- importance of hygiene education

It is expected that these talks will be delivered by governorate-level staff during general meetings with the community during the formation of the WUAs. It is also possible that the WUA president will take the lead in these talks, if a president has already been elected.

These talks should also make use of the social marketing materials developed under a later task in the Action Plan.

7. If possible, test these materials with the actual target groups during the consultancy.
8. Write a brief report summarizing the work accomplished and recommending any next steps.

End Products

The consultant will be responsible for developing three products:

- one-day training design for the presidents
- one-day training design for the treasurers, including the preparation of standard budget and accounting forms
- outline of a series of short talks for educating the community members in the responsibilities of a WUA

Personnel

Two consultants will be required for this task. One should be a training specialist with experience in developing training materials at the community level. This consultant should speak fluent French. The other consultant should be Tunisian and have extensive experience with WUAs, preferably with the USAID-funded project in Kasserine. He or she should preferably have a degree in the social sciences. If the GOT can provide someone knowledgeable about WUAs, then the local consultant may not be required.

Level of Effort

Both consultants will be required for four weeks in-country.

Scope of Work

Development of Training Program for Hygiene Education

General Background

One of the key elements in a successful rural water supply program is hygiene education. Without an effective hygiene education program, health benefits are much less likely to occur. The simple provision of safe water at the tap is not sufficient to ensure the improvement of health. Users must also be aware of the importance of water transport and storage, as well as the hygiene behaviors such as hand washing which are essential to better health.

One of the objectives of the Action Plan is to determine the best approach to hygiene education. In Kasserine, a regional health team was formed in 1987 consisting of individuals from the Ministry of Health, CRDA, the Ministry of Social Affairs, and the Ministry of Education. This team then identified, trained, and supervised female community health workers. Each health worker was in turn responsible for working with 30 families in her own community. They generally have a primary school education, are single, and are 17-25 years old. In Kairouan as well as other governorates, hygiene education is the responsibility of the Ministry of Health personnel who pay regular visits to the community but are based in the provincial capitals. Another approach taken in Kasserine has been the implementation of a school health/hygiene program.

In spite of the lack of certainty over the approach, hygiene education activities will continue during the Action Plan. The KfW project has required that hygiene education be a part of its project. Therefore, the purpose of this task is to develop a training program for hygiene education based on the approach developed in Kasserine, realizing that this may not be the solution adopted by the GOT in the long term.

A second option, in addition to the Kasserine approach, is to train regional health educators from the Ministry of Health. The Ministry of Health has recently decided to refocus its efforts in rural areas to emphasize health education. A decision has been made to retrain existing personnel in health education. In the structure envisioned by the Ministry of Health, there will be approximately 10 employees in each governorate responsible for health education. These people currently are responsible for health inspection of such places as butcher shops, restaurants, etc. These employees are supervised by one person.

In this option, a one-week training program could be developed for the 10 employees in this phase. In a subsequent activity, the supervisors would be trained to deliver a training program for these employees.

Tasks

1. Become familiar with the approach to hygiene education used in the USAID-funded project in Kasserine, especially the training program developed for the regional health team by Carla Rull and the training program for the community health workers. Become familiar with interim approaches to hygiene education adapted for the KfW project.
2. Participate in a team-planning meeting.
3. Determine the hygiene education messages that the hygiene educators should emphasize.
4. Assess the background and experience of the target participants.
5. Develop a training program for the hygiene educators, borrowing where appropriate from the program developed in Kasserine. The training program should include both the trainer's guide and participant materials.
6. If possible, field test the training program and revise it based on the results.
7. Write a brief report summarizing the work accomplished and recommending next steps.

End Product

The consultant will be responsible for developing a guide for training hygiene educators. The training program should be divided into sessions, with each session covering the following:

- session objectives
- overview of the session
- activities
- materials and handouts needed for the session

Personnel

One consultant will be required for this task. The consultant should be a health educator with experience in water supply and sanitation. The consultant should also be skilled in developing training programs and writing training designs. Fluency in French and experience in developing countries, preferably the Arab world, are required.

Level of Effort

The consultancy will require three to five weeks. If a field test can be arranged, then five weeks will be required.

Scope of Work

Training of Trainers: Engineers and Technicians

General Background

During the period in which the national strategy for water user associations (WUA) is developed, a significant number of pump operators will have to be trained. The KfW project, for example, is requiring that each system constructed have a trained pump operator. After the national strategy is agreed upon, there will be an ongoing need for training pump operators.

At this point in the development of the strategy, it is unclear who will ultimately be responsible for training the pump operators. It is possible that it will be a function of GR, a service by the private sector, or perhaps another approach. The institutional study will help in identifying responsibility for this task. The most likely group to be trained during the interim period will be the engineers who are given responsibilities for creating WUAs in each governorate.

The purpose of this task is to train at least one engineer or technician in each governorate to train pump operators. The trainers will learn to conduct a short workshop using the training materials developed under a previous activity in this Action Plan, Development of Training Program for Pump Operators.

Tasks

1. Become familiar with the background of WUAs in Tunisia.
2. Participate in a team planning meeting before departing for Tunisia.
3. Become familiar with the job aids and training program for the pump operators developed under an earlier task.
4. Conduct a brief needs assessment to determine prior background and training experience of the participants.
5. Design an approximately 10-day training of trainers (TOT) workshop for 20 engineers and technicians who will be responsible for training the pump operators. The participants will learn how to conduct a short training program for the pump operators using the job aids and training program previously developed and further their understanding of community organization.

6. The TOT should focus on the following:
 - introduction to the WUA program including the role of the pump operator
 - principles of adult learning
 - basic trainer communication skills
 - use of feedback in training
 - presentation techniques
 - use of job aids for technical training
 - use of demonstration techniques
 - use of visual aids
 - leading a full group discussion
 - designing follow-up training programs for pump operators
7. Conduct the workshop.
8. Evaluate the results of the workshop and revise the TOT design, which should be written for use in future TOTs.
9. Write a final report, summarizing what was accomplished and making recommendations for future TOTs for technical trainers.

Personnel

Assuming 20 participants, two consultants will be required for this workshop. Both consultants should have experience in conducting TOT workshops, speak fluent French, and have some knowledge of the water supply and sanitation sector. In addition to the two external consultants, it is hoped that an individual with substantial technical skills from GR/Tunis will be a full-time co-trainer for the workshop. If someone is not available from GR, then one of the two external consultants should be a technical specialist with experience in pump maintenance.

Level of Effort

Both consultants will be required for five weeks for this task. This includes the following:

- workshop design and preparation (two weeks)
- workshop delivery (two weeks)
- revision of training design and writing final report (one week)

Note: Although this scope of work assumes that the workshop participants will be engineers, another option is to train the engineers and community organization specialists from the various governorates together. It is envisioned that during the Action Plan, GR/Tunis will appoint on an interim basis two people in each governorate to be responsible for WUAs, one an engineer and the other a community organization specialist. These individuals will need to be trained to assume their new responsibilities.

In the optional scenario, the engineers and community organization specialists from half the governorates could be trained in one workshop and those from the other governorates in a second workshop. The second workshop would be a repeat of the first. This workshop would be more complicated than the one envisioned in this scope of work in that part of the workshop would train the two groups together and part would separate the engineers and community organization specialists to allow for practice with the different groups each one will be training. The decision as to which option is used will be made jointly by GR/Tunis and USAID.

Scope of Work

Training of Trainers: Community Organization Specialists

General Background

During the period in which the national strategy for water user associations (WUAs) is developed, a significant number of WUAs will be created, both under the KfW project and through the regular activities of GR. The president and treasurer of each WUA will have to be trained, in addition to sensitizing the community members to their responsibilities in a WUA.

During this interim period, there will be a community organization specialist in each governorate who will be responsible for organizing the training of the presidents, treasurers, and community members. At the time of the writing of this scope of work, it is unclear exactly what the backgrounds of these community organization specialists will be. They may be engineers currently within GR who are assigned this responsibility or they may be individuals detailed from the Ministry of Social Affairs.

The purpose of this task is to train these community organization specialists to train the presidents, treasurers, and community members in their basic responsibilities in WUAs. They will learn to conduct short workshops for all three groups using the training materials developed under an earlier task in this Action Plan, Development of Training Programs for Water User Associations.

Tasks

1. Become familiar with the background of WUAs in Tunisia.
2. Participate in a team planning meeting before departing for Tunisia.
3. Become familiar with the training programs designed for the presidents, treasurers, and community members under an earlier task in this Action Plan.
4. Conduct a brief needs assessment to determine prior background and training experience of the community organization specialists.
5. Design an approximately 10-day training of trainers (TOT) workshop for approximately 20 community organization specialists who will be responsible for training the presidents, treasurers, and community members of the WUAs. The participants will learn how to conduct short training programs using the training

materials previously developed, and will deepen their understanding of community organization.

6. The TOT should focus on the following:
 - introduction to the WUA program, especially the role of the presidents, treasurers, and community members
 - techniques for entering a community and assessing community needs
 - basic principles of community organization
 - principles of adult learning
 - basic trainer communication skills
 - use of feedback in training
 - presentation techniques
 - use of small group techniques
 - leading a full group discussion
 - use of visual aids
 - designing follow-up programs for the presidents and treasurers
7. Conduct the workshop
8. Evaluate the results of the workshop and revise the training design, which should be written for use in future TOTs for community organization specialists.
9. Write a final report, summarizing what was accomplished, making recommendations for future TOTs for community organization specialists, and specifying any next steps.

Personnel

Assuming 20 participants, two consultants will be required for this workshop. Both consultants should have experience in conducting TOT workshops, speak fluent French, and have some knowledge of water supply and sanitation. At least one of the two consultants should be experienced in community development. In addition to the two external consultants, it is hoped that the Tunis office of GR will provide a full-time co-trainer who can become familiar with the workshop design for future use, and improve his or her training skills.

Level of Effort

Both consultants will be required for five weeks for this task. This includes the following:

- workshop design and preparation (two weeks)
- workshop delivery (two weeks)
- revision of training design and writing final report (one week)

Note: Although this scope of work assumes that the workshop participants will be community organization specialists, another option is to train the engineers and community organization specialists from the various governorates together. It is envisioned that during the Action Plan GR/Tunis will appoint on an interim basis two people in each governorate to be responsible for WUAs, one an engineer and the other a community organization specialist. These individuals will need to be trained to assume their new responsibilities.

In the optional scenario, the engineer and community organization specialists from half the governorates could be trained in one workshop and those from the other governorates in a second workshop. The second workshop would be a repeat of the first one. This workshop would be more complicated than the one envisioned in this scope of work in that part of the workshop would train the two groups together and part would separate the engineers and community organization specialists to allow for practice with the different groups each one will be training. The decision as to which option is used will be made jointly by GR/Tunis and USAID.

Scope of Work

Training of Trainers: Hygiene Education Specialists

General Background

During the period in which the strategy for water user associations (WUAs) is developed, it is expected that hygiene education activities will be occurring in conjunction with the formation of WUAs. The KfW project is requiring that hygiene education be an integral part of all the WUAs formed for systems that KfW finances. It is, however, unclear at the writing of this scope of work what approach will be used during this interim period for hygiene education. Kasserine will be continuing the approach it has used, namely, a regional health team training female community health workers who are from the communities where they work. In other governorates, the Ministry of Health has field workers who pay visits to the community on a periodic basis.

In spite of the lack of clarity on the structure and approach to provide hygiene education, this task will proceed on the assumption that one of the two approaches described will be used.

The purpose of this task is to train the trainers of health educators whether they are community health workers or governorate-level hygiene educators. The trainers will learn to conduct an approximately one-week workshop, using the training materials developed under an earlier activity in this Action Plan, Development of Training Program for Hygiene Educators. The participants in the workshop are likely to come from the governorate offices of the Ministry of Health or from regional health teams from three or four other Ministries. The total number of participants will be approximately 20.

Tasks

1. Become familiar with the background of WUAs in Tunisia, in particular the training program for the regional health team developed with the assistance of USAID consultant Carla Rull in 1987.
2. Participate in a team planning meeting.
3. Become familiar with the training program developed for the community health workers under an earlier activity in the Action Plan, Development of Training Program for Hygiene Educators.
4. Identify participants in regional health teams.

5. Conduct a needs assessment to determine the training background of the workshop participants.
6. Design an approximately 10-day training of trainers (TOT) workshop for approximately 20 participants. The participants will learn how to conduct the approximately one-week workshop for hygiene educators previously developed as well as deepen their understanding of hygiene education in a rural water supply program.
7. The TOT should focus on the following:
 - role of a hygiene educator
 - principles of adult learning
 - basic trainer communication skills
 - use of feedback in training
 - presentation techniques
 - use of visual aids
 - use of hygiene education techniques, especially health talks, story telling, and demonstrations
 - leading a full group discussion
 - monitoring the work of the regional hygiene educators and giving feedback when necessary
 - developing a hygiene education program
 - establishing an annual work plan for hygiene education in the governorate
8. Conduct the workshop.
9. Evaluate the results of the workshop and revise the training design.
10. Write up the workshop design so it can be used for similar TOTs in the future.
11. Write the final report, summarizing what was accomplished and making recommendations for future TOTs for hygiene education.

Personnel

Assuming 20 participants, two consultants will be required for this workshop. One consultant should be an experienced trainer of trainers and be familiar with water supply and hygiene education. The other consultant should be a hygiene education specialist with sound training skills. One of the two external consultants should preferably be a woman. Both consultants should speak fluent French and have extensive experience in developing

countries, preferably in the Arab world. In addition to the two external consultants, it is hoped that the Ministry of Health will identify a full-time co-trainer who will become familiar with the training program for future use.

Level of Effort

Both consultants will be required for five weeks for this task. This includes the following:

- workshop design and preparation (two weeks)
- workshop delivery (two weeks)
- revision of training design and writing final report (one week)

Scope of Work

Refresher Workshops for Trainers

General Background

During the Action Plan there will be three separate training of trainers (TOT) workshops: technical trainers for the pump operators, community organization specialists for the water user associations, and hygiene educators for the community health workers. Each one of these groups would benefit from a refresher course held approximately six months after the TOT. The purpose of the refresher courses will be to identify problems that have occurred during the workshops conducted since the TOT, identify ways to solve the problems, and, if necessary, introduce new training skills and discuss technical issues.

Each refresher workshop will be approximately three days in length and will bring together the same participants as in the TOT. In order to use resources efficiently, all three refresher workshops will be conducted during this consultancy. For this reason, at least one of the consultants and preferably both should also have been involved in conducting one of the three TOTs.

Tasks

1. Become thoroughly familiar with the workshop designs and final reports from the previous TOTs.
2. Participate in a team planning meeting prior to departing for Tunisia.
3. Interview participants from each of the workshops to determine the primary difficulties they encountered.
4. Interview both the supervisors of the participants and a sample of the people trained by the participants (i.e., pump operators, presidents and treasurers of WUAs, and community health workers).
5. Design three three-day refresher workshops.
6. Conduct the workshops.
7. Evaluate the results of the workshops and write the workshop designs in summary form.

8. Write a brief workshop report summarizing what was accomplished and what the next steps should be in the development of the trainers.

Personnel

Two trainers will be required for this assignment. Both should be experienced trainers of trainers and at least one must have conducted one of the previous TOTs. Both should speak fluent French and be familiar with water and sanitation and community development issues. In addition, it is hoped that GR will provide one or two full-time co-trainers.

Level of Effort

Both consultants will be required for five weeks for this activity. This includes the following:

- needs assessment, with each trainer carrying out a needs assessment for one of the refresher courses (week one)
- first refresher course (week two)
- second refresher course (week three)
- third refresher course (week four)
- writing workshop designs and final report (week five)

Scope of Work

Water System Maintenance Policy and Procedures

General Background

The regular maintenance of water system hardware is essential to ensuring the sustainability of the systems, and ensuring that the desired benefits are realized. If the systems are not maintained they will deteriorate and breakdown with increasing frequency. The large investment that has been made will be wasted, and people will not obtain the health, time savings, and other benefits from potable water systems. Developing effective maintenance is a complex matter with many issues to be resolved in the formulation of a national strategy. Some of the issues include:

1) *Role of the WUA and Role of the GOT*

An important aspect of the maintenance of these rural water systems is the division of O&M responsibilities between the WUAs (the Board and the pump operator) and the regional CRDA. The current WUA statutes state that the WUAs are responsible for *all* O&M, including major replacements. This policy is the long-term goal, not the current practice. The general feeling is that WUAs, especially those in the formative stages, cannot afford all these costs. At this time, the WUAs must handle daily operations, and some minor repairs and maintenance, while the CRDAs perform major repairs, and finance replacements. In most cases there is no precise set of instructions given to a WUA, (or developed with them) as to preventive or corrective maintenance they are responsible for. The lack of precise instruction makes the responsibilities of the pump operator unclear, especially as concerns preventive maintenance, so these tasks are rarely done. A better approach would be a case-by-case definition of precise WUA preventive and corrective responsibilities, to ensure that the tasks are done. Monitoring of the performance of the tasks will be necessary, and this will be a useful way of judging WUA technical capability.

In many areas the division of responsibility for repair is simply delineated at 100TD. If a repair is below that amount, the repair is paid by the WUA, otherwise, the Government. However this provisional policy is not uniformly applied, and no plan has been developed for how the division of responsibilities will evolve over time. While this delineation of repair responsibility is relatively easy to understand and implement, it sends an undesirable message to the WUAs. There is no incentive created for the WUA or the pump operator to conduct a careful maintenance effort. They can slack off, wait until a serious problem develops, and the Government will come to bail them out.

While technical instructions are easy to develop, the division of financial responsibility is much harder. The mechanisms to be used to decide which costs would be handled by which party need exploration and development. It is clear that the ability or willingness to pay varies widely from community to community, as does the magnitude of the costs to be covered. On one hand, a system which demands all communities to perform similar tasks implies no favoritism, is simple to administer, and is not susceptible to political pressures. But, on the other hand, there are equity problems. A "poor" community, or one with "expensive water" may not be able to collect the required cash. These would require some subsidy, if the desired benefits are to be realized and the investment utilized correctly. However the equity issue dictates that those communities which could cover all or most of the O&M costs and are not currently doing so be encouraged to do so, with some incentive mechanisms. For example, communities which do a good job of collecting revenues and covering a major portion of the overall O&M costs, could be beneficiaries of add-on projects such as more standposts.

Some incentive/disincentive structure, involving technical and financial monitoring and support, needs to be conceived. A means of evaluating WUA technical and financial performance needs to be developed and used as the basis for providing incentives/disincentives. These issues need to be explored, and both short term and long term policies developed.

2) *The Organization of Regional Maintenance Support*

In most Governorates, maintenance of potable water systems is currently conducted by the regional GR office, sometimes in collaboration with the Governorate itself. The technical competence and management procedures vary, but there are considerable improvements that need to be made in maintenance management. In general the crews are occupied with making repairs, in almost a crisis management atmosphere. Little effort is placed on preventive maintenance which could help reduce the high breakdown rate. What is lacking is a systematic maintenance plan which would outline the tasks to be accomplished, the personnel and material resources required, and budget. Few parts are stocked, and most take a long time to obtain. Recordkeeping of actions performed and costs incurred are quite weak. There is little ability to evaluate what has been done, what the needs are, and plan accordingly.

The actual sources and flow of funds also presents problems. Maintenance crew salaries are paid from CRDA budgets. Funds for parts and replacements usually are obtained from the Governorate Council which often obtains funds from local regional development programs (PRDs). Thus the people who have the responsibility for major O&M activities do not have direct control over the funds they need. Procurement of parts has been very slow, and budgets are not based on needs. This has created major problems in several Governorates. A merger of funds under a well directed maintenance unit is the desired approach, however current national government policy prevents such a merger. Policy discussions on the

national level may be able to affect change, under the framework of a national strategy/policy development.

The current procedure for budgeting funds to regional CRDAs and Governorate Councils needs to be explored. Budgets for O&M crews and for parts should be based on a maintenance plan and a plan for replacement of old equipment, and not simply on expenditures over the past years or political considerations. It is possible that incentives could be built in, where regions which perform well on maintenance would receive increased capital funds to build more water systems. Such incentives would reward good work and help improve regional maintenance performance.

Tasks

The tasks under this activity can be grouped into two phases.

PHASE I - POLICY DEVELOPMENT

- 1) **Review existing policy and practices** at GR/Tunis regarding maintenance of potable water systems. The consultants should review the overall maintenance policy as it stands now, studying the advantages and disadvantages. The issues described above must be explored in detail.
- 2) **Collect secondary data** on maintenance requirements, staffing, organization, budgets, actions undertaken, costs, etc. for all Governorates. A list of data needs should be developed, and data collected from a variety of sources, including central offices of MOA, MOI, and MOP. To supplement the secondary data, brief visits could be made to several Governorates to confirm secondary data, and collect information and impressions on experiences, and maintenance policy issues. If practical, a brief questionnaire could be developed, transmitted to each Governorate, and data collected and analyzed.
- 3) **Evaluate experiences and lessons learned** in the pilot effort in Kasserine. Of particular interest will be the solutions found, if any, to the complex problems of multiple crews in two Ministries. Also of interest will be the forms, management tools (work orders, inventory forms, operator logs, computerization, etc.) developed and used in Kasserine.
- 4) **Discuss policy alternatives/options** with Ministries of Agriculture, Interior, Economy and Finance, and Plan. After collecting additional data, alternative approaches to address maintenance problems should be explored, developed, and presented to all concerned parties.

- 5) **Elaborate a new national policy on maintenance.** Based on the data collected, experiences in the field, and discussions of policy options a new national policy on potable water system maintenance should be written and adopted. The policy should elaborate long term plans and intermediate steps to reach the desired long term maintenance policy. A written document should be prepared and endorsed by GR , MOA and other concerned Ministries. This type of consensus is required before detailed procedures can be developed and put into place.

PHASE II - PROCEDURES DEVELOPMENT

- 1) **Develop a generic procedures manual** for the organization and management of maintenance for the CRDAs. The manual would be developed in French, and if judged important translated into Arabic. The manual would give instructions for CRDA personnel on how to develop an effective maintenance systems. Topics to be covered would include:

Pump Operators -	Selection Criteria, Task definition, Training (also below), Tools, Parts & Supplies, Logs, Problem notification procedures.
WUA Leadership -	Links between the WUA leadership and the pump operator, estimation of first level costs - the tool for community involvement in O&M
Maintenance Planning -	Inventories, Condition assessments, Task planning, Organization, Schedules
Maintenance Management -	Work Orders, Records, Cost Accounting, Computerization
Parts/Materials/Vehicles -	Procurement, stores, management, vehicle management
Water System Equipment -	Selection process, cost, performance, parts availability, standardization
Budgets -	Source of funds, administrative procedures, budget development from maintenance requirements, rehabilitation (capital) budgets
Training -	Training for Pump Operators, Training for Regional Personnel, Training resources, training aids, lesson plans, etc. (The material on training will borrow from other activities conducted under this Action Plan which focus on training.)

2) Dissemination of the Procedures Manual and Forms

The procedures manual and any associated forms should be printed and distributed to all GR offices in all Governorates. Personnel involved with maintenance and with WUA formation and monitoring should review the suggested procedures, and assess the need for adaptation to their particular circumstances.

3) Hold Seminars to Review Procedures Manual

One or two review seminars should be held to discuss the suggested procedures, and, as a result of the seminars, recommend revisions.

4) Finalize the Procedures Manual

Personnel

This task calls for the use of local consultants teamed with an international advisor. The local experts will do the bulk of the work, focusing on data collection, manual preparation, and training. The international consultant will work with the local consultants on policy development, and provide some input in the procedures manual.

1. International Maintenance Engineer should have considerable experience with planning and implementing maintenance programs in developing countries. An engineer with experience in financial aspects is preferred. Excellent French or Arabic is required. Individuals with experience in Tunisia, especially efforts in Kasserine, would be strongly preferred.
2. The following local consulting skills would be required:

Maintenance Engineer(s)
Writer/Illustrator
Secretary

A local firm with experience in water system maintenance would be desirable. A direct contract between USAID/Tunis and the local firm would be preferred if possible. The firm must have computer or word processing facilities to produce a high quality procedures manual.

Level of Effort

The required level of effort would include the following:

<u>Position</u>	<u>Person-months</u>
International Maintenance Engineer	2.25
Local Maintenance Engineer	6.00
Trainer	1.00
Writer/Illustrator	1.00
Total	10.25

<u>Task</u>	<u>Person Months</u>		
	<u>Inter.</u>	<u>Local</u>	<u>Total</u>
PHASE I			
1. Policy Review	0.25	0.50	0.75
2. Secondary Data	0.00	0.50	0.50
3. Kasserine Lessons	0.50	1.00	1.50
4. Policy Alternatives	0.25	0.50	0.75
5. Policy Development	0.50	1.00	1.50
Total Phase I	1.50	3.50	5.00
PHASE II			
1. Procedures Manual	0.50	2.50	3.00
2. Dissemination	0.00	0.00	0.50
3. Seminar	0.25	1.00	1.25
4. Finalize Manual		0.50	0.50
Total Phase II	0.75	4.50	5.25
GRAND TOTAL	2.25	8.00	10.25

Scope of Work

Social Marketing

General Background

The purpose of this assignment is to develop the materials and means for increasing public awareness of the concept of Water User Associations (WUAs) through social marketing. It is an important step in developing a nationwide strategy for WUAs which will enhance understanding of what WUAs are, how they can be organized, and their benefits. Marketing the WUA concept is needed to convey information to both potential beneficiaries and government staff, not only in GR but in other Ministries as well.

To encourage greater public awareness of the concept, a team of two consultants, one expatriate and one Tunisian, will develop materials such as posters, fliers, and mass media production for dissemination throughout Tunisia. The activity will build upon tasks already completed and in progress as part of the Action Plan, particularly the training activities.

Tasks

The following tasks will be completed:

1. In collaboration with GR/Tunis and CRDA/Kasserine, a detailed plan of action for marketing the WUA concept will be developed. Both the form (fliers, posters, mass media) and the content (specific concepts to be publicized) will be identified. The content may include such items as what WUAs are, what they can do, how they can be organized, and their benefits.
2. Specific publicity materials will be prepared and published. All materials will be designed taking into consideration the social and cultural context of Tunisia to ensure that all sectors of the population are reached and that materials are appropriate to local conditions. The quantity of materials needed for nationwide distribution will be determined in collaboration with GR/Tunis.
3. A set of instructions and guidelines for long-term marketing will be completed as part of the assignment. The instructions will be submitted along with completed materials. Arrangements will be made to have the materials produced and published in Arabic before the end of the assignment. KfW will pay for publishing costs.

Personnel

1. Expatriate with background and hands-on experience in social marketing, specifically publication, graphic and media production, and development of training materials; experience in rural water sector desirable, preferably in Tunisia or elsewhere in Africa or the Mediterranean; fluency in French required; fluency in Arabic desirable.
2. Tunisian counterpart with background in social marketing in Tunisia, specifically publication, graphic and media production, and development of training materials in Tunisia.

Level of Effort

The level of effort required will be approximately six weeks in Tunisia, three weeks for each consultant. The expatriate will spend one day in TPM to review the tasks to be completed under the assignment.

Scope of Work

Evaluation of Training

General Background

The Action Plan for the national strategy will include a number of training activities involving both the development of training materials and training of trainers. A preliminary assessment will be done prior to the refresher workshops for the trainers as part of the workshop design process. There will not be sufficient time, however, to do a systematic evaluation at that point. A systematic evaluation is important in order to finalize the training approach in the national strategy for water user associations (WUAs). The training activities in the Action Plan will provide a significant base of experience to determine what approach to take over the long term.

The purpose of the evaluation will be to determine the effectiveness of the training for both training trainers and for the creation and operation of WUAs. The evaluation will attempt to answer the fundamental question: Have the training activities contributed to more effective WUAs? This evaluation will not focus on whether or not the trainers felt the workshop was useful or whether or not the training materials were well designed. It will focus instead on results achieved in the following target groups:

- pump operators
- presidents, treasurers, and community members
- community health workers

Tasks

1. Review all the training materials, workshop designs, and final reports for the training activities carried out under the Action Plan.
2. Participate in a team planning meeting before departing for Tunisia.
3. Select a sample of WUAs to visit, focusing primarily on systems financed by KfW.
4. Interview USAID, GR, KfW, and Ministry of Health staff who are familiar with the project at both the central and governorate levels.
5. Interview WUA staff including the pump operators, presidents, treasurers, and community members, as well as the community health workers.
6. Review any statistical data on the formation and operation of WUAs.
7. Answer the following key questions:

- Are the various target groups applying what they learned in the training programs? Specifically,
- Are the presidents effective in carrying out their responsibilities?
- Are the treasurers keeping accurate books and budgeting procedures?
- Are the community members aware of their financial responsibilities and the overall function of the WUA?
- Are individual households practicing sound hygiene education behavior?
- Are the pump operators maintaining the pumps? What level of maintenance are they able to perform?

The consultant should try to determine which results were attributable to training and which to other factors.

8. Write a report which assesses the impact of training on the creation of effective WUAs. The report should make clear recommendations for future training and specify what revisions should be made in the training materials and TOT workshops.

Personnel

Two consultants will be required for this activity. One should be a training specialist who has not been directly involved in the development of the training materials or the TOTs and who is experienced in training evaluation. The other should be a social scientist, preferably a Tunisian, who is experienced in community development. Both consultants should speak fluent French. At least one person must be fluent in Tunisian Arabic.

Level of Effort

Both consultants will be required for four weeks. The first week will be spent in Tunis, selecting the sites and collecting data, the next two weeks should be spent in the field, and the final week writing the final report.

Scope of Work

Mid-Term Review Workshop of Action Plan Progress

General Background

As steps are taken towards developing a nationwide strategy for the creation of Water User Associations (WUAs), a mid-term review will be needed to highlight interesting findings and conclusions, assess progress in developing a strategy, and suggest measures to improve implementation, as required. To accomplish this goal, the purpose of this task is to prepare a draft interim document for review at a workshop on activities completed under the Action Plan to date. Since the Action Plan will cover approximately 18 months, a mid-term review which follows the studies, after about nine months, will ensure synthesis to date and an agreed upon direction for the final stages of preparation for the strategy.

The seminar will convene a group of approximately 10 to 15 people, drawn from GR/Tunis, CRDA/Kasserine, USAID/Tunisia, KfW, and other interested agencies. The results of studies completed and progress in training will be reviewed. The seminar will be convened by GR/Tunis and a consultant facilitator. It will be held for two days.

Tasks

1. Prior to the workshop, two consultants will spend two weeks reviewing studies, training, monitoring, and related activities and prepare a draft document with findings and suggested directions for the plan. Workshop participants will receive copies of the materials for review prior to the seminar.
2. A two-day workshop, preferably away from regular offices, will review the draft document and reach agreements about future directions during the remaining time of the Action Plan.
3. The review will take into consideration changes in the political and economic climate in Tunisia, particularly in terms of efforts to decentralize and to emphasize greater user participation in operation and maintenance of rural water operations. In the face of possible changes, revisions to the Action Plan may be suggested.
4. Following the workshop, the consultants will work closely with GOT officers and prepare a brief report indicating the agreements, activities, and deadlines reached at the workshop. Copies of the report will be submitted to USAID/Tunisia, GR/Tunis, CRDA/Kasserine, and KfW.

Personnel

The assignment requires two consultants experienced in evaluative methods and water user group strategies. One of them ought to have experience in designing, coordinating, and facilitating workshops. Previous work with and knowledge about the Action Plan highly desirable. Fluency in French required.

Level of Effort

The level of effort required will be a total of approximately four weeks. Initial outlines for the draft text will be provided prior to the workshop. The workshop will take place at the beginning of the third week, and two to three days will be required for follow-up and writing the brief report.

Scope of Work

Preparation of WUA Procedures Manual

General Background

As the tasks of the Action Plan near completion and the strategy is finalized, a reference manual will be prepared that sets forth guidelines and procedures for forming WUAs. This manual will need to be written as a standard document for use in implementing the strategy. It is anticipated that one person, either from GR/Tunis or a consultant, will prepare the manual during a period of approximately one month.

The manual will draw upon knowledge gained from training activities and studies of WUA formation as well as the experience of the WUA Coordinating Committee and Community Organization Specialists. It will need to provide a consistent and comprehensive set of guidelines. At the same time, it will need to allow for flexibility, given possible differences in regions and local conditions.

Tasks

1. In collaboration with Community Organization Specialists and other concerned GR staff, the full range of topics to be covered in the manual will be determined. The consultant will visit selected governorates to discuss topics for inclusion in the manual. Training materials may also need to be reviewed for summary descriptions in the manual.
2. The manual will be written in clear and simple language using visual aids where needed. It may be published in a loose-leaf folder which can be modified and added to as required. Some broad topics that should be included in the manual are: job descriptions for WUA members (president, treasurer, pump operator); a description of training needs and procedures for WUA members and for president, treasurer, and pump operators; description of WUA progress monitoring by Community Organization Specialists; description of specific WUA responsibilities for operation and maintenance tasks; and a simplified version of the legal framework for WUAs.
3. The manual will take into consideration the institutional requirements for a national strategy identified in the Institutional Analysis.
4. The consultant will submit four copies of the manual in French (USAID/Tunisia, GR/Tunis, CRDA/Kasserine, and KfW) and arrange to have it translated into Arabic before completion of the task.

Personnel

Expatriate with experience in developing training materials and manuals, preferably in the potable water sector. If possible, the manual will be prepared by GR/Tunis. If not, a consultant who is already familiar with the Action Plan and has worked in Tunisia will be hired. In either case, fluency in French is required, Arabic desirable.

Level of Effort

The required level of effort will be approximately one month. Before commencing the assignment, the consultant will spend one day in a TPM about the tasks of this assignment.

Scope of Work

Preparation of Draft Text on National WUA Strategy

General Background

With assistance from the Genie Rural (GR) Division of the Ministry of Agriculture, Tunisia, and the Kreditanstalt für Wiederaufbau (KfW) of West Germany, USAID/Tunisia is supporting an Action Plan to develop a national strategy for the creation and ongoing monitoring of water user associations (WUAs) in rural Tunisian communities. The Action Plan has undertaken a number of studies and pilot projects to monitor and compare the different approaches and costs employed in forming WUAs in various regions of Tunisia. In addition, the Action Plan has assisted in the development of training materials and the training of trainers for immediate implementation in KfW-supported potable water projects and in other areas where WUAs are operating or being created.

The purpose of the present consultancy is to assist the WUA Coordinating Committee at GR/Tunis to pull together the wealth of information on forming and operating WUAs in Tunisia and to prepare a draft text of the national strategy (to be financed with other funds).

Tasks

1. The consultant will review the various products of the Action Plan and pull together pertinent information to be incorporated in the draft national strategy.
2. In collaboration with GR/Tunis, USAID/Tunisia, and KfW the consultant will prepare a draft text of the national strategy.
3. A first draft of the national strategy will be presented in a briefing with key officials from GR/Tunis, USAID/Tunisia, and KfW. Agreed upon comments will be incorporated into the text. This draft will be reviewed more comprehensively during a national seminar, described under a separate Action Plan activity.
4. A final draft text of the national strategy will be submitted to GR/Tunis, CRDA/Kasserine, USAID/Tunisia, and KfW prior to the consultant's departure from Tunisia.

Personnel

An expatriate consultant with prior knowledge and experience in working with the previous components of the Action Plan. Good writing and public presentation skills are essential. Excellent French or Arabic is required.

Level of Effort

This task will require one month in Tunisia.

This strategy should be 15-20 pages in length and lay out the broad guidelines for creating WUAs. These guidelines will include the following:

- description of the approach(es) to be followed
- staffing in each governorate
- responsibilities of WUAs and CRDAs
- description of financial management system
- institutional structure in GR/Tunis to support WUAs
- overview of training available

Scope of Work

National Seminar for Presentation of WUA Strategy

General Background

The culmination of the Action Plan will be a national seminar to present the national strategy. At this seminar, the draft strategy document prepared under an earlier activity will be presented to a group of high-level decision makers for their comments and concurrence. Although the composition of the group will be decided prior to the seminar, it is expected that it will include CRDA commissioners, governors, department heads from the Ministries of Health, Social Affairs, Plan, Economy and Finance, and representatives from the major donors working in Tunisia.

The seminar is intended to provide an opportunity for critical decision makers to have input into the strategy and at the same time launch the national strategy. It is hoped that there will be media coverage by both television and the press. (To be financed with other funds.)

The purpose of this activity is to assist the Tunisians in designing and facilitating the seminar.

Tasks

1. Review the draft national strategy and other relevant documents leading up to the strategy.
2. Participate in a team planning meeting prior to departing for Tunisia.
3. Assist the WUA Coordinating Committee in designing a two- to three-day seminar for high-level decision makers to review and approve the national strategy.
4. Coach any presenters and assist in the preparation of any visual aids.
5. Take the lead as facilitator where appropriate during the seminar.
6. Assist in the smooth running of the seminar.
7. Write a brief report on the results of the seminar and the workshop process.

Personnel

One consultant will be required for this task. The consultant should be experienced in facilitating national-level seminars and be fluent in French. The facilitator should have preferably been involved in earlier activities in the Action Plan. It is possible that the consultant who assisted in writing the national strategy will also be involved in the seminar. This decision will be made several months before the workshop.

Level of Effort

Two weeks will be required for this task, if only the facilitator is involved. If two consultants are required, then four weeks will be required.